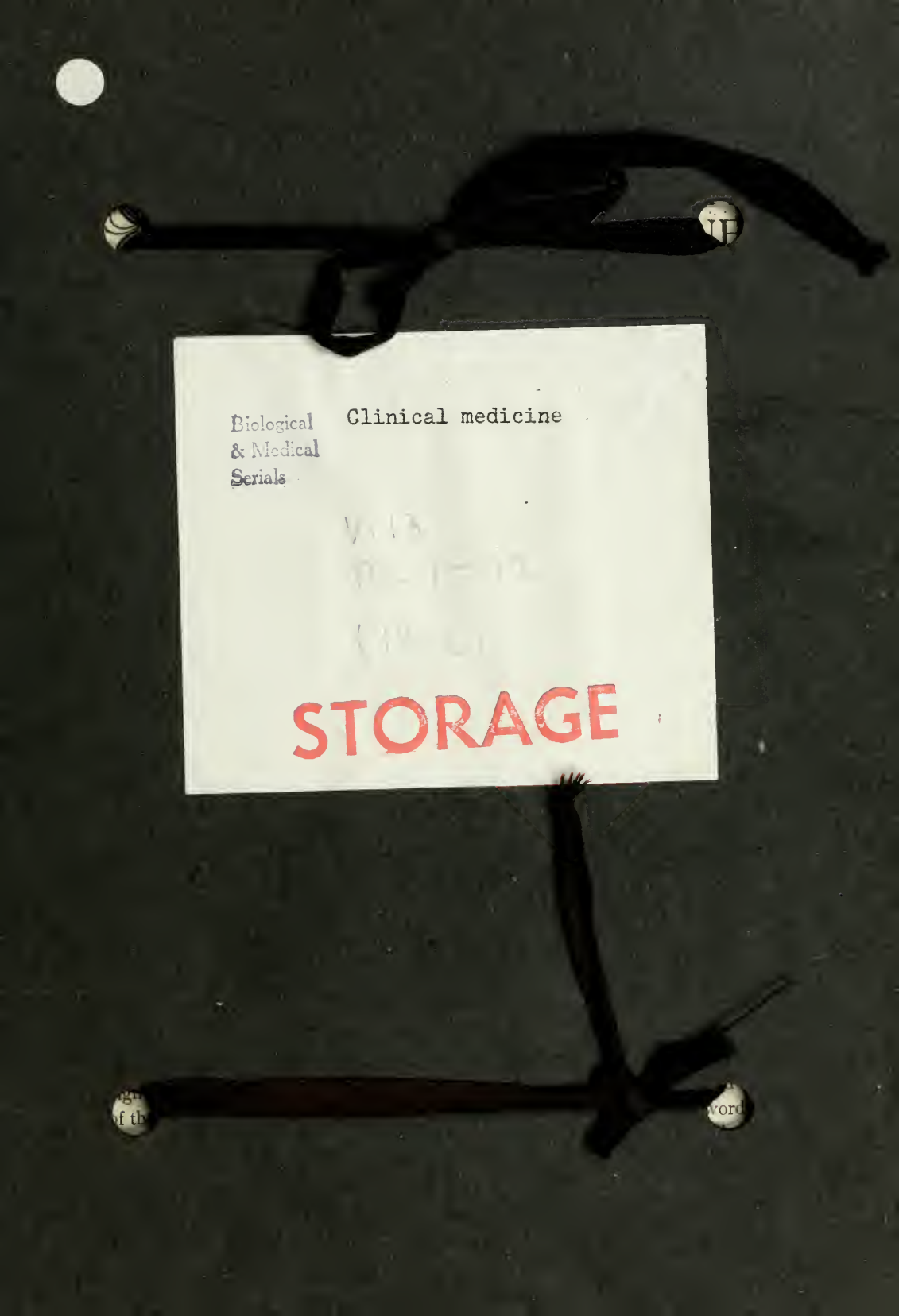
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GOOD OR BAD DRUGS—WHICH ARE YOU GETTING?

LAST month, in our editorial on "A Positive Proof of the Variability hence Unreliability of the Galenicals," we promised our readers more interesting reading on this subject, especially upon the part played by the retail pharmacist in the matter of galenic uncertainty. This matter has recently been brought strikingly to our attention by a letter received from a well-known New York physician who has been quietly investigating some phases of this question. We quote the following from his letter:

"The average retail drugstore has a Dispensatory thirty years old, some few of them fifteen; you may possibly find the Pharmacopeia of 1890 in one out of fifty. I do not believe you will find the Revision of 1905 in five drug stores in Greater New York. I went to twenty drugstores. Of the twenty all had copies of the United States Dispensatory but back twenty to twenty-five years. One had a Dispensatory fifteen years old only. There was not a copy of the Pharmacopeia among them, much less of the eighth decennial revision. I asked each one of the responsible men in these drug stores by what method they made the preparations of aconite. They told me according to the method given in their "Dispensatory."

While we know our reporter to be a man whose word can be depended upon, yet we cannot believe that he correctly pictures the state of pharmacy in Greater New York—nor do we believe that this state of things can be taken as typical of pharmacy throughout the United States. But the indictment is one that must be reckoned with and it is accompanied with such wealth of detail concerning the culpable ignorance, carelessness and inefficiency of these twenty men, that the question must immediately force itself to our attention. Do such things prevail to any considerable degree in many other drugstores upon which physicians are depending for their supplies—in those to which your prescriptions go?

The recent revision of the Pharmacopeia made some very striking changes, especially in the strength of such potent drugs as the tinctures of aconite, veratrum viride, strophanthus and digitalis. In this it differed from preceding revisions, in which the changes, though numerous, were not likely, if overlooked, to be followed by disastrous consequences. The change in tincture of aconite is typical, this important remedy being reduced in strength from 35 per cent to 10 per cent; in other words the old tincture, the one with which all drug stores were properly stocked until a year ago, *is three and a half times as strong as that now official.* And yet in the face of this we are confronted with the astounding statement that twenty druggists in New York (and no one knows

how many more) are still dispensing tincture of aconite "according to the method given in their dispensatory"—a book which is out of date and has been for from one to three decades. The doctor who prescribes the weak aconite now official may inadvertently give a dose three and a half times that intended, simply because some druggist is culpably ignorant or criminally negligent, and a patient may pay for this ignorance with his life.

This is a question which concerns every doctor in the country. If such a condition exists in New York as our correspondent claims—and we cannot doubt it, since he has submitted to us ample proofs—then it is highly probable that it exists elsewhere. Doctor, can it be possible that the druggist or druggists who are dispensing your prescriptions have no up-to-date Pharmacopeia, that they are depending for their information concerning the preparation, strength and dosage of the potent tinctures and other liquid preparations, upon long-antiquated and now dangerously inaccurate Dispensatories; that they are filling your prescriptions for tincture aconite with preparations three and a half times as strong as you desire, with veratrum four times as strong, digitalis one and a half times as strong, strophanthus half as strong, and other things in proportion? Is it possible, as our correspondent writes, after a personal examination of samples which he bought in different stores, that many of these men are dispensing drugs which have been in stock so long that they have become inert, that others make their tinctures by diluting the fluid extracts as directed on the out-of-date labels of the manufacturer instead of according to the Pharmacopeial formula, that many of the best, while made direct from the crude drug, are unstandardized and of unknown and uncertain alkaloidal strength?

The doctor's success depends largely upon his tools. What can you expect to accomplish when your drug cannot be depended upon; when you are uncertain whether the remedies you are giving will be absolutely inert or so concentrated as to be deadly poisons? Doctor, it is your business to know and if circumstances compel you to prescribe rather than to dispense, it is incumbent upon you to know your druggist—know that he and his preparations can be depended upon. Let us suggest that you catechise him, find out where he stands. Suppose you ask him these questions:

Have you a Pharmacopeia? What edition is it? Have you a Dispensatory and when was it published?

The last edition of the Pharmacopeia, the Eight Decennial Revision, was published in 1905. The Pharmacopeias are usually published at about ten-year intervals, the one preceding this, the edition of 1890, appearing in 1893. The Dispensatories are commentaries upon the Pharmacopeias, embodying the information contained in the edition of that book just preceding; containing, in addition, a large amount of information concerning unofficial drugs. The Pharmacopeia is the official "law book" of medicinal preparations and is so recognized by most states and by the U. S. Government. It gives the requirements as to the preparation of drugs and tests concerning purity, strength, etc.

How do you get or where do you procure your tinctures? Do you buy them ready-made from some reputable house; do you make them yourself from the crude drug; or do you make them by diluting fluid extracts?

Most of the tinctures supplied by the best manufacturing houses are now generally standardized, but while this insures total alkaloidal strength it does not guard against variability in the proportion of the constituent

The liver assimilates, stores and supplies proteids, carbohydrates and fats, receives and converts metabolic products.—Quincke.

The liver forms a central point of metabolism in comparison with which bile secretion seems insignificant.—Quincke.

alkaloids nor subsequent changes in strength; the tinctures made by the druggist from the crude drugs may be good or bad—it all depends upon the quality of the drug used in their preparation, this again depending upon season, conditions of growth, age, the honesty of the gatherer, middle men and dealer—and several other factors; tinctures made from fluid extracts vary widely in content from those made as prescribed by the Pharmacopeia. This leads to the next question:

Do you know that tinctures, infusions and other preparations made from fluid extracts are radically different from those made in the official way?

This needs no comment, except to say that thousands of druggists are undoubtedly making their infusions and tinctures in this way, and that the desired therapeutic effect may be entirely lacking because of this vicious habit.

Are your tinctures and fluid extracts standardized?

So long as physicians will insist upon using preparations which, at the very best, must vary in their active-principle content, it is absolutely essential, to assure even reasonable accuracy of result, that they shall be standardized. It is only by having assurance that their strength has been determined by proper assays that the physician can have any certainty whatever concerning the results which will follow their use.

Is your tincture of aconite that of the 1890 *Pharmacopeia or of the Eighth Revision? With which do you fill prescriptions? How do you guard against errors?*

This is a very important question and one upon which explicit information should be given. It is unfortunately true that both physicians and druggists are often ignorant of this change, and that lamentable and fatal errors may occur as a result. The doctor and druggist must understand each other. The physician should also inquire concerning the tinctures of veratrum, digitalis, strophanthus, hyoscyamus, squills; of the syrup of iodide of iron and other things in which radical changes in strength have been made. There are too many uncertainties in galenical medicine at the very best to allow of taking additional chances, through which the strength of the medicaments you are administering may vary from 30 to 75 per cent.

Look things over carefully. Inspect the stock bottles ancient and modern, noting color, sediment, taste, and smell; buy samples of the more potent drugs and administer them tentatively to the family cat—first being assured of the consent of the good wife. This is a vital matter, one which concerns your success in life and the health and recovery of your patients. We would that you could see with us the advantages of the "alkaloidal way;" yes, and we have a suspicion that if you look personally into this matter and find out for yourself what a rope of straw the galenicals are, you will understand why we have urged you so long and so earnestly, and why we urge you now to investigate the superior advantages of the active principles. When you use these and only these can you *know* what you are doing.

SOME INTERESTING STATE ANALYSES OF DRUGS.

The *Independent* of Fairmont, Minn., Sept. 15, gives the results of state analyses of various nostrums dispensed to the citizens of that commonwealth. Among the lot are several "honey and tar" preparations, whose manufacturers singularly forget to inform users of the presence of such trifles as chloroform, morphine, salicylic acid and croton oil, possibly dreading to encounter an unreasonable prejudice against these innocent

·Stadelmann denies that oil increases flow of bile, but Blum found that sodium oleate markedly increased it

Contraction of bile ducts is manifested particularly in gallstone colic, possibly in other painful spasms.—Quincke.

substances. "King's new discovery for consumption" seems to have consisted in the new name for the old mixture of pine tar, honey, syrup and the inevitable chloroform and morphine. Peruna is described as alcohol and water, the "percentage of other material being so small (0.51 per cent) it is not easy to imagine that this so-called remedy for all human ills is anything else than a diluted low-grade whisky."

It has been objected that the announcement that "bitters" practically consist of whisky may increase their sale among persons who might otherwise be debarred from alcoholic drinks. This is a fallacy. The men who will do this know the facts already, and if they do not get liquor one way may be depended on to secure it some other way. What publicity does is to prevent innocent persons forming the liquor habit unwittingly, under the belief that they are taking a useful and needed medicine. If a man wants liquor and is willing to pay the highest price for the meanest quality, knowingly, that's another matter.

The *N. Y. Herald* of Sept. 15, discusses adulterated drugs saying: "Physicians are complaining that it is almost impossible to have their prescriptions properly compounded. Cheap and inert medicines are substituted for pure and costly articles by dishonest pharmacists, and wholesale manufacturers are charged equal fraudulent practices, not only by substituting other drugs than those required, but by reducing the dosage to save expense of production."

The *N. Y. Commercial* of Sept. 18 quotes from Dr. Parlington's official report founded on analyses of 10,000 specimens from wholesale drug establishments. Of these no less than 72 per cent were found to be adulterated or otherwise failing to comply with the requirements of the Pharmacopeia; 28 per cent were reasonably pure, and 56 per cent so rank as to warrant for criminal prosecution of the vendors.

Well, if there is nothing in drugs, what's the difference? The druggists seem to have taken the detracting remarks made by "leaders" in the medical ranks literally, and who can blame them? It may be noted that this revelation coincides with the demand made by the druggists that physicians shall be forbidden by law to dispense. Truly, our legislators may pause before they give the exclusive privilege of dispensing to the men who make the above showing of their probity and efficiency. It is these things that force us to dispense our drugs, much against our will. We don't want to do it; we haven't the time, the inclination or the skill to do pharmaceutic work, and we don't want to take time to learn; we would most heartily leave it to the drug men if only they would so act as to enable us to do so conscientiously. But with such a record before us our duty to ourselves and our patients compels us to hold in our own hands the control of our drugs.

The *Milwaukee Wisconsin* says that a physician cites the death of a prominent New York financier, who was ordered tablets of nitroglycerin gr. 1-100 each. Those dispensed contained but 1-2000 grain. The physician rightly declares that a death under such circumstances is little less than murder.

Nevertheless, the physician cannot shift all the blame upon the druggist. The law compels naval commanders to take a pilot when entering certain ports, but the inefficiency of the pilot does not excuse the commander if the vessel suffers injury. It is the doctor's duty to know that his drugs are right, and justly, as he knows the patient's grave state better than does the druggist.

QUERY:—Since the New York physician has been getting 72 per cent of non-standard

Whenever the liver is in a state of unbalanced equilibrium even slight external influences may produce disease.—Quincke.

Seasonal changes in prevalence of liver diseases may depend on changes in bacterial content of the alimentary canal.—Quincke.

drugs on his prescriptions, would he have a less pessimistic view of drug therapy if he had obtained always standard articles? We can well see that with 72 per cent of failure he has reason for his distrust. But this only refers to articles as they leave the wholesaler —we must add the deteriorations, the inefficacies of the retail pharmacist and his substitutions. If they equal those of the wholesaler, it is a nice problem in mathematics to ascertain what chance the doctor has of getting what he orders.

If we were attending a great financier and wanted to give him glonoin, we would take the trouble to get some grannles that we would try and know all about, and dispense ourself. And if we were a great financier we would employ a doctor who would take that much trouble—and then we'd see that he did it.

SCOPOLAMINE VERSUS HYOSCINE.

SCOPOLAMINE, A MIXED ALKALOID, SHOULD NEVER BE USED.

We have the highest admiration, we might say reverence, for the truly marvelous accomplishments of modern chemistry. There is no other science which has made such gigantic strides as the science of chemistry has, particularly since 1828, the date of Wochler's pregnant discovery, and nobody can predict or foresee just exactly what the future chemist has in store for us. But once in a while the chemist is apt to assume too much. From an apparently identical or even only similar constitution, from a similarity of the end-products of an ultimate analysis he is too apt to assume—and announce—a therapeutic similarity or identity.

We have seen such examples in the last Pharmacopeia (U. S. P. 1890), when oleum betulae volatile, methyl salicylas and oleum gaultheriae were pronounced practically identical and the implied permission was given to substitute one for another.

This Pharmacopeial statement was sharply criticised; the committee of revision apparently saw the force of the criticism, for in the present Pharmacopeia the statement is very *materially* modified. Now it reads as follows (see U. S. P. VIII, p. 290): "*For flavoring purposes*, oil of gaultheria, oil of betula and methyl salicylate may be regarded as identical products." Now, this is quite different. That at once implies that for therapeutic purposes the products are not identical. While no doubt the manufacturers will still continue to substitute methyl salicylate or oil of sweet birch for the natural oil of wintergreen, they will at least do so without the sanction of the Pharmacopeia.

Now, unless we are very much mistaken, the next edition of the Pharmacopeia will contain a different statement about scopolamine than the present one does. The present Pharmacopeia in its description of scopolamine hydrobromide limits itself to the following statement: "The hydrobromide of an alkaloid obtained from plants of the *solanaceæ*. Chemically identical with Hyoscine Hydrobromide (See Hyoscinae Hydrobromidum)." One might ask, if the two alkaloids are *identical*, and if they are prepared from the same source, why have them under two different headings? Why not give scopolamine merely as a synonym of hyoscine, as is done with so many other articles? But we will let that pass.

We have always felt that scopolamine—the commercial variety, at least, the only one obtainable—was not the same as hyoscine; we have always had an impression that it was rather a mixture of two alkaloids, and that it varied in its therapeutic and *untoward* effects according to the relative proportion of the two, or according to the per-

Pain in the liver is due to inflammation of the serous cover and not to disease of the parenchyma. —Quincke.

Pain in bile passages originates in the muscular layer, caused by stretching, and spasmodic contraction.—Quincke.

centage of impurity. For this reason we refused to handle scopolamine, and stuck to hyoscine.

A statement by Prof. John V. Shoemaker, of Philadelphia, which we have come across recently, fully bears out our suspicions. The statement is exceedingly important and we reproduce it. (*New York Medical Journal*, Oct. 7, 1905). "It may be of importance," says Dr. Shoemaker, "just in this connection to note, as pointed out by Hesse, that commercial scopolamine hydrobromide contains an admixture of a small proportion of another powerful mydriatic alkaloid known as 'atroscine,' which is isomeric with hyoscine or scopolamine. Atroscine apparently bears a similar relation to the latter as regards mutual convertibility that hyoscyamine does to atropine. Some pharmaceutical authorities indeed allege that scopolamine hydrobromide *should be erased* (italics ours) from the German and United States Pharmacopeias, on the ground that it is merely a mixture of hyoscine hydrobromide and atroscine hydrobromide, and not itself a definite chemical compound. I call attention to this interesting point merely to note the fact that commercial scopolamine hydrobromide may differ in its physiological action, owing to the variable quantity of atroscine present; this may also offer an explanation of any difference that may be observed between the action of scopolamine hydrobromide and hyoscine hydrobromide."

In view of the above, which has been fully verified both in and out of our experience, we feel fully justified in advising every physician as strongly as we can to leave scopolamine severely alone. For surgical and obstetrical anesthesia, hyoscine and morphine should be used, and most decidedly not scopolamine and morphine. We have no doubt that many of the failures, accidents and dangerous by-effects reported in foreign literature were to a great extent due to the impurities in the scopolamine.

As to this hyoscine-morphine anesthesia matter, it requires but a moment's thought to determine its importance, an importance second only to that of the discovery of chloroform and ether anesthesia. Not alone in surgery is it important (major, not minor, sleep is too profound for that), but even more so in obstetrics, relieving labor of practically all its pains and terrors, and in smaller dosage as a general relief for pains as well. The especial efficiency of this preparation lies in the fact that hyoscine absolutely counteracts the tendency of morphine to lock the secretions, without impairing its pain-relieving properties.

Thus, out of much labor and after many years, an ideal, hypodermic pain relief and anesthetic is at last evolved, the value of which, to the profession and through them to the people, cannot be estimated.

Thousands of cases have now been treated at the hands of hundreds of competent observers with perfect success and not one adverse report has been received. Dr. H. L. Imus, Borculo, Mich., says: "I used the tablet "hyoscine, morphine and cactin comp." in my last confinement case and it is simply *fine*. Two painful emergency cases were made quickly easy by appropriate doses of the same tablet."

Thousands of samples are going out (see "ad" pages this issue) and experience-reports, obstetrical as well as surgical and general, are desired. If you haven't had a sample and will test one, ask for it. Not only is convenience to the doctor to be considered, and the fact that there is no subsequent nausea or depression, but expense and portability as well. Enough for fifty to one hundred treatments can be carried in the vest pocket and costs but a single dollar.

Gallstone pain is distinguished by intensity, periodic exacerbations and independence of external pressure.—Quincke.

Acute hepatic autointoxication appears a few days before death and is more dangerous than uremic or diabetic.—Quincke.

We urge our physician friends to investigate this important matter. This method of anesthesia promises to be epoch-making. Try it and report.

A PHARMACIST'S OPINION ON THE PHYSICIAN AND PROPRIETARY REMEDIES.

In connection with our editorial, "The Physician is and should be the Sole Judge," printed elsewhere in this issue, it is pleasant to record that not all pharmacists take a narrow view of the matter. The words of William C. Alpers, a prominent pharmacist of New York are so much apropos, that, though uttered some time ago, we take great pleasure in reproducing them here:

"Let us clearly understand that a physician has a right to prescribe and to specify what he pleases, be it a regular official preparation, a new synthetic compound, a proprietary article, or goods of some manufacture that he prefers to others for some reasons. Neither the great variety of similar preparations, nor the obscurity of some specified article, gives us the right to criticise the prescription. There is no way out of it. This state of affairs may be a hardship to us. We may suffer by it, but we never can deny the right of the physician to order what he thinks is good for the patient. We cannot say he is wrong because he orders John Smith's elixir, nor say that John Smith's is all right but he must not prescribe it because we have John Brown's instead. We can never put ourselves on record as in the least censuring the physician for ordering what he honestly believes to be for the patient's good. If the physicians are wrong in judgment, it is not our business to say so. The more you pass such resolutions intimating that the physicians are wrong in ordering whatever medicine they please, the more you will widen the breach between pharmacist and physician. The physician's friendship is a valuable capital to the pharmacist. Let us strive to gain it, not by dishonest commissions or presents, but by doing our duty faithfully and practising our profession with devotion and ability."

We can only say that if the majority of pharmacists entertained and acted upon the above opinions, antagonism between the professions of pharmacy and medicine would be a thing unknown. Both professions would live in harmony and would go hand in hand with mutual benefit to each. Unfortunately, this is not the case and only too often does the pharmacist assume to dictate to the physician; only too often does he assume to know better than the physician does what is good for the latter's patient.

ALCOHOL AND THE LEUCOCYTES.

Metschnikoff's way of asking a friend what he'll take is, "Would you care to paralyze your leucocytes?" Metschnikoff has observed that after a rabbit has taken alcohol it can not be made immune against anthrax, the phagocytes having been paralyzed by the alcohol. This adds another cogent reason for the disuse of alcohol in medical practice. We have strenuously opposed the use of alcohol on the ground of its inferiority to the various active principles in every condition for which alcohol may be prescribed with benefit. As thinking and observing men we have opposed alcohol on account of the frightful disasters sometimes following its use. We now have an additional reason for opposing it in the remarkable discovery above described. When Metschnikoff first promulgated his phagocyte observations they were received as Jules Verne's amusing romances had been —too beautiful to be true, as one said.

The liver may be rested by withholding all food for a time, but of all organs it suffers most from deficient nutrition.—Quincke.

It is dangerous to allow the functional activity of the liver to sink below a certain point by fasting.—Quincke

But the profession has taken the theory into its subconsciousness, and thinks and reasons today from it as a basis. Let us hope that his objection to alcohol may be similarly received and adopted. Brave man, who dares assault that thrice-intrenched evil, great King Alcohol!

Begin by adjuring the alcoholic preparations, which are as capable as peruna of arousing the hereditary craving for stimulants, and may also interfere with and obscure the action of the drugs they carry. Lloyd has called attention to the fact that alcohol is by no means simply an excipient, but possesses powers that may affect the drug or the taker. Stick to the simple remedy and avoid the possibility of evil and of uncertainty.

THE PHYSICIAN IS AND SHOULD BE THE SOLE JUDGE.

Our readers know that we are in complete sympathy with the movement for the purification of proprietary therapeutics; we welcome any light that may be shed from any source. We recognize that mystery in medicine is indefensible. And we are ready to give our support to any reform movement in this direction. But certain tendencies are making themselves felt which must be taken up and analyzed. Sympathy with a movement in its entirety does not preclude the right to criticise certain phases of it.

We are told that it is an insult to the intelligence of the physician when the manufacturer tells him what medicines to use in certain diseases, in what doses, etc.—that it is an insult for the lay manufacturer to teach the physician therapeutics. Granted. But is it not just as much of an insult on the part of would-be-leaders to tell the physician not to use this or that medicine, which he may have found thoroughly satisfactory in his practice, merely because it does not comply with certain arbitrary rules? When a physician has tried a certain remedy, be it patent or proprietary, and has found it to give the expected results, is it not equivalent to telling him that he is an ignoramus, that he does not know what is good for his patient, etc., when we order him to discard it, merely because the name appears fanciful, or the wording of the reading matter doesn't suit the critic? We are certainly to assume that the physician is honest, that he seeks the welfare of his patient and that he would not continue to prescribe medicines which he did not think were indicated. And to try to coerce him to discontinue the use of well-tried remedies, under the penalty of being dubbed unethical or ignorant, because the name of the medicine is not strictly scientific, or because the quantitative composition is not given, or because the mode of employment is printed on the label, or because there is a wrapper around the bottle, we say to try to coerce the physician to give up the use of well-tried remedies for various trifling reasons is either to insult his intelligence or, by implication, to accuse him of the most dastardly dishonesty. The physician should know what he is prescribing, but he should be the sole judge. He is the sole responsible agent, he is responsible to his patient and to his conscience only and nobody has a right to order him to prescribe this or to ridicule him for prescribing that.

There is another phase of the question with which we have no sympathy and which ought to be thoroughly discussed. Plaints are often heard from druggists and those who represent their interests, that the multiplication of the proprietary medicines is a great hardship, because it compels the druggist to keep a large stock. He is compelled to keep on his shelves seven preparations of organic iron, five different kinds of

Acute catarrhal icterus calls for the smallest possible quantity of food to spare the liver and for other reasons.—Quincke.

Diet of any one class of foods throws on the liver an excessive strain in the digestion of that one class.—Quincke.

essence of pepsin, as many preparations of fluid extract of cascara, a dozen different preparations of ergot, four or five different preparations of the active principle of the suprarenal gland, etc., etc.

When examined closely this will be seen to be irrelevant and puerile. What does it amount to? It amounts to this: the druggist is obliged to invest more money in stock. Well, this is true of all business. The grocer of today is obliged to invest a good deal more than his forefather did, because life is more diversified, the people want greater variety and more changes. The same is true of therapeutics. While the individual physician may use but a small number of drugs, the diversity in the tastes, opinions and methods of treatment of physicians is much greater and the drugstore of today is obliged to carry a much greater variety of remedies than the drugstore of fifty years ago. And going deeper into the subject, wherein is the druggist the sufferer? Suppose he dispenses five one-pint bottles of different makes of fluid extract of ergot—is he any worse off than if he dispensed five one-pint bottles of the same make? No, only he has to invest a little more money in the beginning. That is the only trouble. And to compel the physician to limit himself to a small choice of remedies or to one brand only, because otherwise the druggist would have to invest a little more money in stock, is certainly absurd. And to consider the multiplicity of remedies or brands of remedies a justification for substitution, as some druggists do, is too damnable for discussion.

We repeat with all possible emphasis: *The physician is the sole judge of what he should prescribe. He should be educated to prescribe or dispense intelligently, scientifically. But no coercion, no ridicule, no ostracism must be attempted. The physician is the sole judge of what is good for his patient; he is the court of the last appeal! It is a duty and a responsibility.*

CANCER AND "THE SIMPLE LIFE."

Dr. Senn has been traveling in the Congo, and finds matter of interest in the conditions presenting by the forest dwarfs. The nearer we approach the simple, primitive life, the less frequent do we find cancer. The malady follows the flag of civilization and is one of the penalties the savage pays for the privilege of setting his foot on the first rung of the ladder that may lead his remote descendents to a place beside the Senns, after an evolutional struggle of centuries through alcoholism, tuberculosis, syphilis, eruptive infections, and the other preliminaries that welcome the intruder at the threshold.

Granting that Senn is correct, and correctly reported, we should go back along the path of the race until we reach the spot where cancer will cease to pursue us. But how far back must we go? And are there not other monsters whose recollection has faded from the knowledge of man, grisly Dwellers at the Threshold, to be found awaiting us there?

Senn says cancer is due to luxurious living, overnutrition. Primitive folk are not subject to this evil, their entire existence being occupied with the task of securing enough to sustain life and protect it from others similarly occupied. In so far we may agree that by limiting our eating to our exact needs, and by giving our muscles the exercise they require, we may avoid not only cancer but many other maladies of more general prevalence. But does not this presuppose, on the part of man in mass, a degree of intelligence and self-control that does not exist, whether we look to the ultra civilized or the ultra savage? The wildest Australian may go hungry much of the time,

The bacteria of the intestine can produce toxic products capable of irritating the liver as alcohol does.—Quincke.

In every form of icterus it is well to give plenty of water to promote copious secretion of urine.—Quincke.

but it is from necessity and not choice; and when he does have access to a full meal he gorges in a way no ordinary gourmand would attempt.

Is it not, then, a higher degree of culture we should seek rather than a going back to nature, which is far more attractive in fiction or theory than in every-day fact?

Dr. Senn condemns the recently revived trypsin treatment of cancer. He does not find that this powerful digestant seeks out the rebellious epithelial cells and destroys them from among the healthy, obedient ones, leaving the latter with a simple warning against the evils of bad company. The mental development of the trypsin molecule does not as yet permit to it such fine discernment, and it remains a potent toxic agent when injected into the human tissues, healthy or diseased.

How about condurangin?

Tell us, please. We presented the evidence on which we based our belief that warrants a retrial of this agent, applied locally to cancer tissues. We have made no further claims than this. We do not know whether it will or will not cure cancer, or the limitations of its powers in that way or as a toxic agent. We are waiting to be shown.

The same as to nuclein solution in enormous doses, injected hypodermically, once a week for a month. Will it cure cancer? Won't it? We do not know. Some tell us it will—and why should they falsify? All we know further is that they keep right on using it.

No honest physician can at the present time give any other advice than to urge on cancerous persons the earliest and most radical resort to the knife, in every case in which there is a chance for its application. Let that injunction sink into the soul. But in the cases where the surgeon simply can not cut, as in a case of multiple recurrent carcinoma affecting practically all the organs, just applying to us, surgery is out of the question. Here there is a field for the trial of any remedy that offers a plausible excuse, provided it be comparatively harmless in the bargain. If perchance the results are sufficiently encouraging we may try it in other cases.

Revenons a nos moutons: How, after all, does overfeeding and luxurious living act in the production of cancer? Is it, can it be, in any other manner than by supplying to the blood an irritative principle that causes the undue and pernicious activity in the epithelial elements affected? The extra supply of food beyond the power of the system to digest and assimilate is surely followed by decomposition and toxin-formation in the alimentary canal—we all know that. Whether there is toxin-formation further along is an assumption altogether gratuitous. We can wait till that is proved before accepting it as a step in cancer causation, and meanwhile may assign this to what we do know, intestinal autotoxemia.

We try not to get faddish on this subject, and to restrain ourselves strictly within justifiable limits. We know that many morbid states and disease processes are set in operation or are continued by the presence in the blood-current of toxins of intestinal origin. The more deeply we delve into this matter the more widespread we find the effects of this etiologic element. We suspect that most or all the diseases of the nervous tissues not specific or due to known microbic influences are attributable to intestinal toxemia. We know that correction of this fault is followed by benefits too radical and invariable to be explicable on the hypothesis of accidental sequence. The same is true of many chronic disorders of many tissues and organs. We do not know how

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In the U. S. 224 persons are annually killed by lightning between April 1 and Sept. 30; most in the southeast.—Draper.

Lightning strokes are 5 times more frequent in the country; the oak is most liable, beech least so. —Draper.

far this principle extends, and we feel warranted in the assumption that it does no harm and may be susceptible of untold good, to begin all treatment of all maladies by emptying the bowels and disinfecting them, and taking such measures as will keep them empty and aseptic. This we have done for a long time, watching for the exceptions to appear. They have not appeared yet, and we suspect there are none. Since only good and never harm results from the application of this therapeutic principle generally, let us even apply it in the treatment of those in whom there exists a predisposition to carcinoma, at least until the progress of knowledge furnishes us better remedial methods.

THE FALLACY OF STANDARDIZATION.

Experiments made at the Hygienic Laboratory of the Public Health Department at Washington by Reid Hunt (*J. A. M. A.*), show a marked variability in the market preparations from the suprarenal glands. Specimens that purported to be equal in strength differed to the extent of one being double the strength of the other. The prices were however, approximately equal when relative strength was considered; so that the shrewd parties who marketed their goods at half the price of the others reaped the harvest as purveyors of cheap goods, while they actually gave just the same amount for their customers' money as the apparently dearer goods brought. An ancient trick, and one that surely ought not to catch an intelligent physician.

Analyses of suprarenal preparations reported by Sollman and Brown from the Western Reserve laboratory show a sliding scale of efficiency running from 100 per cent to *nil*. Most of the samples showed a total absence of efficiency after standing a single day, and but one out of eight was at all active after two days. This variability was not between samples of different manufacture but in comparing those of single houses also. It was not known if the variations were present when the goods left the manufacturers' hands, or were due to subsequent deterioration. The conclusion is that "the physician in injecting this powerful substance, is at present unable to use a perfectly exact dosage."

"DOPE FOR QUACKERY" AGAIN.

In the September number of CLINICAL MEDICINE we called attention, editorially, to one of the problems which is confronting the medical profession—the necessity of fixing the responsibility for the multiplication of the ever-increasing horde of vicious "patents," of getting right down to the basal facts of this matter. As we said in that editorial, fully 95 per cent of the manufacturers of these vile concoctions have no laboratories of their own, no chemical or pharmaceutical knowledge or experience, most of them absolutely no medical knowledge. How then are they able to evolve these "wonderful discoveries," these "sure cures" which are warranted to cure the whole gamut of disease from "acne" to "zymosis?"

The answer is—they aren't!

The genesis of a patent medicine is something like this: One or more "bright" men conclude to go into the patent-medicine business; being untroubled by that handicap to fame and fortune, a conscience, they are, as Dooley says, "at peace with the world, the flesh and the devil;" they have a few hundred dollars, and in lieu of medical knowledge (which is not at all essential) they have some advertising experience or at least some advertising gumption. (The brightest stars on the patent-medicine constellation are advertising men.)

Flammarion said one could not study the freaks of lightning without recognizing the work of a tricksy intelligence.

A living thing is nothing but a system of energy and life is only a matter of chemistry, says Oswald. —*Med. Times.*

For the "medicine" they go to some one of the great and supposedly ethical pharmaceutical houses, which being firmly established and financially sound, thanks to the dollars which an appreciative medical profession is constantly pouring into their coffers, can give them bargain prices—the doctor, meanwhile, "paying the freight." The advertising man is relieved of all responsibility concerning *his* "wonderful discovery:" the manufacturing pharmacist supplies the formula, attends to all the details of manufacture, prints the labels (thereby assuring that the names of all the diseases which the medicine will "cure" are correctly spelled!), and helps the astute proprietor in the preparation of the technical part of the literature. The advertising man knows how to do the rest—to sell the dope.

Now the point of all this is, that without the aid and cooperation of these pharmaceutical houses the vast majority of these nostrums could not exist. In other words, firms which were created by you and are dependent upon you for their existence are in secret alliance with your enemies! Now what do you propose to do about it?

We believe that the medical profession is waking up to the importance of this question. Already the publicity which has been given it is beginning to bear fruit. Medical societies all over the country are passing condemnatory resolutions, showing that the profession properly resents this double-dealing policy, which has actuated and still controls the affairs of many of these pharmaceutical houses.

The following are average samples of what have come to us:

DEAR DOCTOR ABBOTT:

I have read the editorial carefully. This is *certainly* a step in the right direction and not only demands the attention but the decided action of every physican who is alive to his own interests.

I shall take great pleasure in presenting this matter to the Pocahontas County Medical Society at our next meeting and hope to see it have the consideration and action its importance demands.

When the profession stand together for their rights—demonstrate a spine not equaled by the angle worm—giving their undivided support to those who *will* act in such matters—then and not until then will they command the consideration justly their due.

Fraternally yours,
J. W. STARR, M. D.
Sec. Pocahontas Co. Med. Soc.
Pocahontas, Iowa.

DEAR DOCTOR ABBOTT:

I have read your editorial in last CLINICAL MEDICINE with interest.

Last night I prepared a preamble and resolution which was unanimously adopted by our county medical society. If you care to publish this we would be pleased to have you do so.

Fraternally yours,
E. STUVER, M. D.,
Sec'y.

RESOLUTIONS LARIMER COUNTY MEDICAL SOCIETY.

At the regular meeting of the Larimer County Medical Society, Dr. E. Stuver presented the following resolution which was unanimously adopted, viz.:

Whereas, the widespread use of patent and secret medicines has become a serious menace to the people of our country, and—

Whereas, it has been credibly reported that a number of the large pharmaceutical, manufacturing firms, that make standard preparations for the medical profession, also prepare for the exploiters many of the dangerous proprietary and patent medicines, and—

Whereas, such a practice is dangerous to the people, derogatory to the dignity and welfare of the medical profession and an aid and encouragement to quackery—

Be it therefore resolved by the Larimer County Medical Society, that we condemn such practice and call on all medical societies and physicians to assist us in inducing such

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Prostatic Hypertrophy:—Hyoscine, 10 granules in 2-3 glass water, a teaspoonful every hour as needed.—*Medical World.*

The presence of nuclein is probably the secret of the value of juices from raw vegetables.—*Medical World.*

firms to confine their work to legitimate pharmaceutical manufacturing.

E. STUVER,
Secretary.

Fort Collins, Colorado, Sept. 5, 1906.

These are significant samples of the replies we have received. We earnestly urge every one of our readers to continue this work—to take it up in your medical society and let in the light. Pass resolutions and get the resolutions published, not in this journal but in the state and local organs of your societies, where they belong. Make the pressure so strong that no reputable house can afford to continue this nefarious practice.

ADULTERATED DRUGS.

We have so often insisted that it is the doctor's duty to *know* what kind of drugs his patients are getting, because both their welfare and his reputation depend upon it, that it would hardly seem necessary to refer to the matter again. Every reader of CLINICAL MEDICINE knows how we stand. But this question is such a vital one, not only to the success of the individual physician and the welfare of the individual patient, but to the future of medicine as a whole, that we deem it a duty to present all the facts, leaving the judgment to others.

The following clipping from the *Nashville American* is a remarkable testimony as to the weakness of the reed upon which galenical practice leans:

New York has been prosecuting wholesale druggists for selling defective and adulterated drugs. In a recent investigation 10,000 samples were analyzed and only 28 per cent of them were found pure or reasonably pure while of the remaining 72 per cent, 56 per cent were so bad as to warrant prosecution of the sellers under the criminal code of the state. One case was reported some time ago in which a physician prescribed digitalis. In putting up the prescription the druggist made a mistake on the label and indicated a dose that meant death. When the error was discovered druggist and physician hurried to the patient's home in the hope of saving his life, but when they arrived he had taken the fatal dose. He was quite comfortable, however, and there were no signs of evil results. Analysis showed that the drug had been so adulterated it was utterly worthless, and powerless for good or evil. The adulteration of drugs should be made a penal offense. If New York wholesale druggists adulterate drugs in such a wholesale manner how many druggists in the country who buy drugs from them have drugs that can be relied upon? There should be laws in every state providing for and compelling regular inspection and analysis of drugs.

To bring the matter nearer home we print the following excerpt from an Illinois paper. It seems that the adulteration, sophistication and substitution of drugs is by no means confined to New York. Moreover, we have a suspicion that if this condition should be thoroughly investigated it would be found much more widespread than any of us have imagined. The quotation follows:

The Illinois board of pharmacy is after druggists who use impure drugs and out of 100 decoy prescriptions sent out to Chicago druggists to be filled, 23 contained no trace of the drug called for, 60 were 80 per cent impure, 10 were 20 per cent impure and only 31 pure. The board will prosecute 100 druggists for selling impure drugs.

Whose is the fault? It certainly is not that of the retail pharmacist alone. Indeed we believe that in many instances he is made the medium only for the sale of these inert or dangerously adulterated drugs, and that he is merely the scapegoat. But good drugs are obtainable by any one who in the mad race for profits, is not attracted by that devil of cut-throat competition, cheapness! But whosesoever the fault, the doctor must protect himself and his patients, if he really cares anything about permanent

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The fate of the wounded depends much on the time and thoroughness with which first aid is rendered.—Senn, *J. A. Mil. Surg.*

The first aid dressing should combine simplicity with safety against post-injury infection.—Senn, *J. A. Mil. Surg.*

success in his work. His source of supply must be beyond reproach. If you cannot be *sure* of this what remains for you but to dispense your own remedies? Can you do better?

STAND BY COLLIER'S.

If you are not reading *Collier's Weekly*, if you have not done so for the past year during which that incisive journalist, Samuel Hopkins Adams, has been lambasting quacks and quackery, under the caption of "The Great American Fraud," you are missing the treat of your life and failing to cooperate with one of the greatest aids to the honest medical profession—as no man of you should do.

Collier's is telling the truth to the people, just where and when it is most needed—just what you should all do by voice, and by pen, through the public press in your own localities.

As a sample of this work get and read the issue of September 2d, "The Scavengers," dealing with hell's minions, the drug-habit promotors, those who profess to cure the morphine-habit by giving dope that makes the condition of the patient all the worse. Note the following clipping:

THE CURE.	WHAT IT CONTAINS.
Richie Painless Cure	Morphine
St. Paul Association Cure	Morphine
Tri Elixiria (Charles B. James)	Morphine
The Purdy Cure	Morphine
Maplewood Institute (J.L. Stephens)	Morphine
St. James Society Cure	Morphine
O. P. Coats Co. Cure	Morphine
Harris Institute Cure	Morphine
Morphina-Cura	Morphine
Opacura	Morphine
Prof. M. M. Waterman	Morphine
Drug Crave Crusade	Morphine
Denarco	Morphine
Dr. J. C. Hoffman Cure	Morphine
Dr. B. M. Woolley Cure	Morphine
Dr. J. Edward Allport System	Morphine

THE PRINCIPAL QUACK MORPHINE CURES

When the Pure Food law goes into effect these vulturous enterprises will go out of business, as each "cure" must be labeled with its full content of morphine.

The doctor who reads *Collier's* will, if he is not in the fight and already posted, have his eyes opened; and he will do well if he uses his influence to secure the greatest possible circulation of this and kindred, fearless, truth-telling publications in his locality. We sincerely trust that the articles of this series will now be republished in cheap pamphlet form and given the widest possible circulation. If this is done, every doctor who has a care for his people, and has a lick of business sense, will set up nights to see that every family in his circle is supplied.

Collier's, you are doing a great work! We suggest that you do this—give these exposures a more permanent form. We know the medical profession should and we believe it will help you in the circulation of such a pamphlet.

The psychology of the times favors the honest doctor. The strongest possible forces are engaged in a great work that leads directly to his professional and material betterment, and he's a chump if he don't take hold earnestly to help himself.

SOLANINE.

Genevil (*Jour. med. de Paris*) says that solanine affects the motor ends of the nerves of organic life; narcotizing the medulla, spinal cord and nerve trunks, paralyzing the terminations of both sensory and motor nerves. This places it among our best analgesics. It is safe even in quite large doses. with ordinary care it is harmless, and has no cumulative action. It is especially useful as a substitute for morphine. It does not congest the brain, even in the aged, and this should apply equally to infants. Whenever there is need to overcome excitement, spasm, or pain, solanine should meet the highest success.—*N. Y. M. J.*

First aid must have in view treatment of shock, hemorrhage, wound dressing and immobilization of injured part.—Senn, *J. A. Mil. Surg.*

Probing of recent gunshot wounds must be prohibited by the most stringent regulation.—Nicholas Senn, *Jour. Am. Mil. Surg.*

LEADING ARTICLES

SOLANINE: A USEFUL REMEDY IN EPILEPSY.

BY W. C. ABBOTT, M. D.

SOLANINE is an active principle found in various plants of the natural order, Solanaceae—Solanum Carolinense, dulcamara, ferox, lycopersicum, nigrum, and in the young shoots and the sun-burned or sprouted tubers of the ordinary potato (Solanum tuberosum). The deeper layers of potato skins which have been exposed to the light may contain enough of this substance to produce toxic symptoms.

Until recently there has been some question as to whether solanine should be considered a glucoside or an alkaloid. Bocquillon-Limousin calls it a glucoside, Spiegel an alkaloid. Merck formerly listed it as a glucoside, but called attention to its basic properties. King's Dispensatory and Cushny's Pharmacology list it as a "glucosidal alkaloid." While it undoubtedly has glucosidal properties the fact that it combines with acids to produce salts places it safely among the alkaloids.

Solanine occurs in fine, silky, colorless needles, has a bitter taste, is insoluble in water, slightly soluble in ether and cold alcohol, quite soluble in hot alcohol. It melts at 235°C. Upon being heated with acids it breaks up into sugar and a closely related alkaloid, solanidine. In some plants both solanine and solanidine seem to be present (Cushny).

According to Brunton, Nothnagel and others, the most important action of this alkaloid seems to be exerted upon the central nervous system; in ordinary dosage it seems to have a depressant or sedative effect and for this reason has been much used by French physicians as a nerve calmant and analgesic. In toxic doses, according to Brunton, it paralyzes the central nervous system, the medulla and cord, without affecting the peripheral nerves or voluntary muscles. It is this power of lowering central nervous irritability arising in the spinal cord upon which its therapeutic value seems most to depend. It slows the heart and respiration and under toxic doses the temperature falls, while there is headache, depression, weakness and in severe cases pallor or cyanosis, dilated pupils, short periods of unconsciousness with acceleration and then slowing of the pulse (Schmiedeberg). The action of solanine seems to resemble closely that of sapotoxin, according to Perles being an energetic protoplasmic poison. It is a decided local irritant of the gastrointestinal tract, in large doses producing nausea, vomiting and colicky pains. Waugh notes (THE ALKALOIDAL CLINIC, March, 1905) that the first evidence of solanine action seems to be an acrid burning in the throat and suggests that this would indicate the full therapeutic effect, and that when this presents the remedy should be discontinued until the symptom subsides. According to Perles solanine is not so likely to produce diarrhea as poisonous potato; on the other hand, he found it a decided irritant of the kidney, more likely to produce nephritis than other sapotoxins. In small doses it is probably mildly diuretic.

Solanine has been used in medicine to a limited extent as an analgesic and antispasmodic. Geneuil recommended it as a substitute for morphine in neuralgia, gastralgia and rheumatism; Desnos employed it in painful maladies of the stomach; Clarus and Capparone found it valuable in whooping-cough; while Sarda employed it with apparent satisfaction in diseases of the central nervous system. Other diseases in which it has been suggested are asthma, tabes, bronchitis, cystitis, sciatica, spasmodic pulmonary affections, indeed in spasmodic affections of all kinds.

Of the plants containing solanine those most used in medicine are dulcamara and the horse-nettle (Solanum Carolinense). The former is much used by the eclectics and this is termed by Lloyd a mild narcotic, diuretic, alterative, diaphoretic and discutient. They recommend it in respiratory catarrhs, a great variety of skin troubles, for vesical catarrhs, for suppressed menses, as a nervous sedative, especially in sexual excitation (though it is said to increase venereal desire), etc. The specific indications are "scaly skin affections, acute disorders due to cold and damp, deficient capillary circulation in the skin, diminished cutaneous action with urinous odor, cold and blue extremities, full tissues with tendency to edema."

But of late years more therapeutic interest has attached to Solanum Carolinense. This remedy, variously known as horse-nettle, bull-nettle, sand-brier, treadsaf, treadsoft and poisonous or ground potato, has long been used by negroes in our Southern States as a remedy for epilepsy and according to Porcher, as an aphrodisiac; they gathered the roots and berries and steeped them in whisky, thus dissolving out their active principles. Attention in this country was first called to the medicinal virtues of this plant by Porcher, about the middle of the last century, in his "Report on the Indigenous Medical Plants of South Carolina," but in this work he quotes a French work published in 1837, to the effect that Valentin used the berries in tetanus. Other reporters refer to this use of the drug, for which it evidently had considerable celebrity in the South during the first half of the nineteenth century. Its revival during later years was apparently due to reports made by Dr. J. L. Napier in the *Medical World* for 1889 (see King's American Dispensatory).

The medicinal value of this remedy undoubtedly depends upon its active principles, solanine and solanidine. These have been carefully studied by Thrush, who says (*Phil. Med. Jour.*, May 3, '02): "All parts of the plant were found to contain two alkaloidal constituents, which chemical examination proved to be solanine and solanidine combined with an organic acid called solanic acid. The solanidine was found to be present in about 6.7 per cent the amount of the solanine. The fruit contained the largest amount of alkaloidal constituents, hence is the most active therapeutically, then the root, leaves and stem in the order of their activity."

In his study of the medicinal properties and uses of the most important of these alkaloids, Dr. Thrush speaks as follows:

"Solanine has been used extensively for a number of years by the negroes in the southern States in the treatment of epilepsy and with excellent results, as has been confirmed by a numbers of observers. It has been used in hysterical convulsions with prompt results, also in a case of eclampsia, in which it controlled the convulsions after everything else had failed. It has proven valuable in Bright's disease when the kidneys were acting but slightly and the patient was taken with convulsions; it completely controlled the convulsions, besides being an anodyne and antispasmodic, also a

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Under no circumstances attempt to remove bullets till this can be done under strict aseptic precautions in hospital.—Senn.

Consumptives improve remarkably on potas. permanganate and then they always have disastrous hemorrhages. Why?

valuable and active diuretic. It is efficient in controlling epileptic convulsions attending painful menstruation, also epileptic attacks associated with imperfect development, chorea and puerperal eclampsia. It has been used with much success in pregnancy with convulsions due to albuminuria, also in uterine hemorrhage, and it acts as a powerful styptic in arresting hemorrhage.

"In order to obtain satisfactory results, the remedy should be carried to its full constitutional effect, which is indicated by drowsiness and stupor, then reduce the dose. It has been used with good results in tetanus and neurasthenia, and it appears to restore the want of equilibrium between the gray and white matter of the spinal cord. It does not affect the epigastrium like the bromides.

"Solanine is used instead of morphine in neuralgic affections, the vomiting of pregnancy, in bronchitis and asthma. Desnos recommended the administration of solanine to persons addicted to the morphine habit in place of morphine, when a sedative is required. According to him it is a valuable remedy in painful diseases of the stomach, similar in its action to cocaine and chloroform water. It is well adapted to individuals who easily become accustomed to morphine (hysterics and inebriates). Solanine is a poison to the terminal motor plates. It narcotizes the medulla and spinal cord, causing a paralysis of the terminal sensory and motor nerves. By reason of this, solanine is to be classed among the best of analgesics. It may be prescribed in large doses without danger, and it presents none of the inconveniences of morphine and atropine, and there is no danger of an accumulative action. It does not cause congestion of the brain, even in the aged, and probably a like freedom exists in children. In all cases in which it is necessary to calm excitement, relieve pain or overcome spasms, it promises excellent results. It may be given with advantage in place of morphine to relieve any of these conditions."

It is as a remedy for epilepsy that solanum has been most highly extolled. A number of observers have observed excellent results from this drug, used to replace the bromides. It diminshes the severity and frequency of the attacks and seems to be entirely free from the distressing side and after effects which render the bromides so objectionable. Pearce, in his "Diseases of the Nervous System" says: "The berries of the horse-nettle, or Solanum carolinense, especially in the form of the fluid extract, I have found beneficial in a number of cases of idiopathic epilepsy where there is no hereditary taint", and again he says, "after all other methods have failed, a fluid extract of the berries, pushed to a dram four times a day, has prevented an attack for three months, whereas the girl had been having them previously on an average of one attack every ninth day."

Spratling, Medical Director of the Craig Colony, New York, says: "I recall several cases in which Solanum carolinense (horse-nettle berries) worked remarkably well after about everything else had failed." Other clinicians give similar testimony.

But the most careful report ever made of the use of this drug in epilepsy, so far as we have been able to find, is that of Dr. M. Clayton Thrush, published in the *Philadelphia Medical Journal*, May 3, 1902. A series of twenty-five cases of epilepsy were treated by him with it in three Philadelphia hospitals. In these cases the fluid extract of the fruit and root were mainly employed. His results were tabulated as follows:

"1. It is of greatest value (probably better than any one known remedy) in grand mal of idiopathic type without hereditary taint, and where the disease has begun beyond the age of childhood.

The metric system is a fad in the brains of certain enthusiasts, says the *Boston Herald*, and Wile says "Me too."

Gangitano records 12 cases of intestinal obstruction treated by hypos of atropine, rather unskilfully but with benefit.

"2. It is perhaps next of greatest value in hysteroepilepsy with marked convulsive seizures. In cases of petit mal the drug does not seem to do the great good that we have noted in the major type of the disease.

"3. In cases of well-advanced epilepsy of any type in which there is degeneration of the cerebral neuron, the drug will act specifically for a time, even better than the bromides, but it will finally be determined that the bromide salts will ultimately control the attacks better in these cases.

"4. The foregoing clinical study has brought out sufficient clinical evidence to warrant the statement that the inherent advantage of vegetable depresso-motors is great as compared with any mineral salt given with the same intent, since destruction of the blood corpuscles by the latter is a most detrimental feature towards lessening the resistance of the individual in a disease where, above all, the constitutional tonicity should be favored as ideal treatment.

"5. A thorough impregnation of the nerve cells can alone be had, and therefore cure hoped for in epilepsy, in proportion as solanum is pushed to the fullest physiological dosage, and maintained through periods of months, a year not being too short a time to warrant its discontinuance.

"6. The fluid extract of the drug made freshly is the ideal form of pharmaceutical preparation, given in ascending doses, commencing with one fluid dram, and increasing to the full constitutional effect. It is to be decidedly preferred to the bromides in those cases in which it can be used advantageously, because no toxic symptoms follow its free administration, and the mental faculties are not impaired by its use."

A study of these reports must convince the reader of the value of this drug,—but why the fluid extract? Why not the alkaloid? These questions naturally suggest themselves after noting the clear statement of Prof. Thrush concerning the alkaloidal content of the alkaloidal plant and the remarkable effects which follow the use of solanine. There can be no question that the virtues of the remedy reside in this alkaloid, solanine, and this has been clearly demonstrated by my own clinical experience and that of my co-workers and friends. In the light of this I feel safe in saying that in this alkaloid we have a much more certain, and dependable remedy than the crude drug, one which when given with discretion in properly selected cases, always "to effect," will greatly alleviate and when used in association with other appropriate remedies will cure many of these distressing cases.

What are the evidences of physiological effect? As already said by Dr. Thrush, this is indicated by drowsiness and stupor, beyond which point the drug should not be carried. When this point is reached the dose should be slightly reduced and continued just beneath the point of tolerance. The suggestion of Dr. Waugh concerning the "acrid burning in the throat" should also be carefully noted as a guide to dosage. As will be noted the physiological action of solanine closely parallels that of the bromides, but minus their disadvantages. Solanine is a safe remedy, one which will not cause any dulling of mentality, nor when given in proper dosage, even such disagreeable minor symptoms as acne and digestive derangement.

Do not however make the mistake of seeking in solanine a "specific" or a "cure" for epilepsy. It is an adjuvant, merely, just as the bromides are adjuvants, to other and more essential measures. Perhaps no single remedy can do more—but it will not accomplish everything. Fundamental, here, as in so many other diseases, is toxemia. While the metabolism of this disease is obscure

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Peterson advises very small doses of bromide in epilepsy, if used at all; tonic-laxatives and hygiene better.—*Am. Med.*

Savage refers mental and nervous maladies to toxemias, from infections or disordered metabolism. —Lettsomian Lecture.

we are more and more convinced, with our increasing experience, of the truth of this statement—the details of which were so ably and elaborately brought out by our co-worker, Dr. George H. Candler, in an article in this journal for February. And in the vast majority of cases the *fons et origo* of the deranged metabolism is to be found in the digestive tract. Spratling and others have clearly shown the relationship between overeating and improper food and the frequency of the epileptic seizures, and have demonstrated the marvelous improvement which will often follow the rigidly enforced non-stimulating and restricted diet. This gives the key to the essential treatment, a key which we are surprised that more physicians do not use. We insist and urge that elimination is of paramount importance, or as we have so often advocated, "the clean-out and keep-clean idea." Of course this is not all: Hereditary influences, nervous instability, reflex irritations, especially these affecting the genital sphere, intercurrent disease, unfavorable environment, all these must be taken into consideration as links in the vicious chain. But we are reminded of a statement made we think by Burggræve, that if to any disease there are several causes, remove *one* and the effect ceases. There is a large modicum of truth in this.

The treatment we suggest in these cases therefore includes thorough emptying of the bowel with calomel (associated with podophyllin, iridin or other hepatic stimulants), to be followed by a saline laxative; the saline should be given daily for a sufficiently extended period to assure thorough cleaniness. Colonic accumulations may require enemata. Keep the bowel clean with the sulphocarbolates. The liver must be kept in the best possible condition with bilein and boldine; it is the great disintoxicating gland. Use proper digestive aids when required, such as pepsin, papayotin, quassin, etc. For nerve building use lecithin, a remedy which plays a most important part in the treatment of epilepsy. Use proper remedies to strengthen the heart, to improve cellular nutrition, to improve the quality of the blood. Treat any intercurrent defect, such as nasal or ocular troubles, sexual diseases—anything which may prevent perfect physical health. And above all insist upon the most severe supervision of the diet, habits, sexual life and work of the patient.

But replace the bromides with solanine. Once the essential and exciting causes have been kept under control by measures just decribed this remedy may be depended upon to arrest or modify the paroxysmal attacks, and in cases amenable to treatment arrest their progress and not infrequently contribute to a complete cure of the disease. For fuller details I refer you to the article upon the the treatment of epilepsy, already quoted, by Dr. Candler.

The dose of solanine, as given by various authors, varies widely. Bocquillon-Limousin places the dose for the entire day at 1-4 to 1-2 grain, while Merck and others give at each dose from 1-6 to 1 grain, or as high as 7 1-2 grs. a day. The rational way to administer it is to commence with small doses, one to six granules, 1-67 grain, increasing the dose gradually until the point of tolerance is reached, then to maintain the dose slightly below this. Here again our maxim, "dose to effect" comes in. Success will follow if it is adhered to, and failure is to be expected if it is ignored.

Solanine has a demonstrated therapeutic value, not by any means limited to epilepsy. It deserves further trial in tetanus, whooping cough, asthma, in painful maladies (especially those of a spasmodic character) as a mild analgesic, etc. I urge its use in all such cases, and trust that fuller reports may soon be forthcoming. But as regards epilepsy

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Persistent diarrhea means persistent irritation Remove this by flushing, laxatives and intestinal antiseptics.

Read the queer old treatment described in the *N. Y. M. J.'s* prize series on lumbago and say if reform is not needed.

its value is so striking, so well demonstrated, that I feel justified in most earnestly urging every reader of CLINICAL MEDICINE to give it a trial, associated, of course, with other appropriate remedies.

Chicago, Illinois.

THERAPEUSIS AND TREATMENT OF INTERSTITIAL GINGIVITIS DUE TO AUTOINTOXICATION.*

BY EUGENE S. TALBOT, M. S., D. D. S., M. D., LL. D.

FORMER research has been confined to etiology, pathology and diagnosis. I intend here to discuss treatment. For more than a decade I have paid special attention to constitutional treatment of patients that have required such services. This has been a most fascinating as well as satisfactory research. For reasons elsewhere mentioned, interstitial gingivitis due to autointoxication first manifests itself in the alveolar process. In therapy it was therefore necessary to examine the gastro-intestinal canal, liver, urine and blood pressure.

Of one hundred and fourteen patients under consideration sixty-four had received local treatment by other dentists and had obtained more or less temporary benefit. Later the disease had returned. The patients ranged from thirty-eight to sixty-nine years of age. All had symptoms of autointoxication. Eighty-two had more or less headache, eight at times had sick headache and vomiting, six were irritable, forty-six were fatigued. These symptoms are due, no doubt, to the open winter. It is difficult for the eliminating organs to adjust themselves to the unusual climate of Chicago. Seventeen had muscle soreness and itching. Twenty-two had neurasthenia, to a more or less marked degree accompanied with neuritis, eleven had cutaneous eruptions, seven had arteriosclerosis, sixteen had rheumatism, nine had albuminuria, two diabetes, twenty-nine were more or less nervous, six had asthma, ten were markedly constipated, eighty-four had gastro-intestinal fermentation which produces indol in the small intestines and indicanuria. The other twenty may have also shown indican since urinalysis in all patients with interstitial gingivitis has shown it. Thirty-two had flatulence to a marked extent, twenty-six had sour stomach, eight had had syphilis and seventeen gonorrhea, four had tuberculosis, two had pleurisy, nineteen had been previously salivated, one hundred and seven showed above-normal blood pressure, all had interstitial gingivitis.

In treating such patients, the stomatologist must be as familiar with general diseases as the physician. He must be more alert than the general practician for the reason the stomatologist can forewarn his patient of the oncoming storm, while the physician usually is not called until it has already broken.

The trend of medicine is toward prophylaxis. The stomatologist in the treatment of interstitial gingivitis has the advantage of the general practician since he is thereby able to prevent the tendency to more grave disorders. Many times have I told my patients after urinalysis they were suffering with autointoxication which required treatment. They would later return with

*Read before the New Jersey State Dental Society, July 18, 1906.

Neubauer finds a little alcohol quite useful for acetonuria in diabetics strictly deprived of carbohydrates.

Essen-Moller finds in 5000 Swedish women menstruation began most often at 15, 14, and 16; extremes 10 and 23 years.

the statement from the family physician they were in perfect health. Had the family physician recognized the tendency to grave disease portrayed in the mouth, his diagnosis would have been far different. The patient with interstitial gingivitis due to autointoxication is sick so far as the stomatologist is concerned although able to come to the office and attend to his duties. He is not sick in the eyes of the family physician since the symptoms have not markedly manifested themselves constitutionally. When the organs are involved, although interstitial gingivitis be present, it is beyond the province of the stomatologist to treat such conditions. The attending physician should be informed. I have saved patients from an early grave by anticipating a tendency to grave disease avoidable by strict attention to diet and treatment. In other patients, where grave symptoms were observable, I was able to inform the family physician in time to prevent serious result. In a few, it was impossible to prevent rapid progress of disease already well advanced when they came under notice. There are people in their graves who might be alive and well had they changed their methods of living when requested to do so. Club life and fast living have carried many a man and woman to an early grave. More people are injured by overeating than overdrinking.

The first symptoms of pathologic effects due to autointoxication are observable in the alveolar process. In the treatment of interstitial gingivitis, the stomatologist should be mindful of the fact that the patient's system is tending toward disease. Recognition of this fact is of great importance.

After more than ten years' research, I am able to give a reliable treatment which graduates of any reliable dental school may prescribe with perfect safety and positive results.

In my discussion of "Interstitial Gingivitis due to Autointoxication as Indicated by the Urine and Blood Pressure," I reported fifty cases. Every examination showed want of balance in the eliminating functions. Accumulation of waste products in the system means interference with oxidation as well as imperfect elimination. In most cases this interference with the oxidation and imperfect elimination is due, first to the senescing and tired-out eliminating organs. With age, the bowels and kidneys lose tone; as a result waste products or toxins circulate in the blood. Between twenty-five and forty years of age, odors emanate from the lungs in the breath, from the armpits and about the thighs. The skin and the lungs are trying to do the work of the bowels and kidneys. Second, constipation and want of proper attention to the bowels. This is particularly true of women. The fact that there are one, two or even three loose movements of the bowels each day does not demonstrate elimination. Yet few people realize this.

A twenty-seven year old woman had not been feeling comfortable for some time. There were no marked symptoms. She felt tired, face drawn, skin and eyes had a bluish color, headaches and pain in the back. The alveolar process was tender and, as she expressed it, "itchy;" teeth sore to touch. Urinalysis revealed specific gravity 1007, reaction acid, albumin trace, urea 0.7 per cent, indican, degree of acidity twenty *in licu* of thirty to forty-five. She had one, sometimes two movements a day. The bowels, however, were packed with fecal matter. Her physician requested her to flush her bowels with warm water and call the next day. On return still more fecal matter was found. Four similar treatments were required before the bowels were cleared.

Alder finds intravenous injections of nicotine produce the same effects as adrenalin and digitalis.—*N. Y. M. J.*

Bond is forced to the conclusion that arteriosclerosis is due to absorption of toxins from the alimentary canal.—*N. Y. M. J.*

A fifty-six-year-old woman had been treated locally by a dentist for eight years. Her teeth grew worse each day. The alveolar process was nearly destroyed; most of her teeth were banded. When she came to me she had a tired look, face drawn, skin and eyes discolored. The muscles of the right side of the face and lips twitched. She was taking pus into her stomach with every swallow. Urinalysis showed specific gravity 1029, hyaline and granular casts, a few pus cells, urea 2.6 per cent, indican, degree of acidity fifty. I removed the loose teeth and turned her over to her physician, who found the entire bowel filled with fecal matter.

In a similar case, a fifty-five-year-old woman had an impacted bowel, in the center of which was an opening about the size of a silver quarter, through which soft fecal matter passed after taking medicine, which had become necessary each day. This accumulation had been present for more than a year. Such cases are frequently encountered.

Constipation and want of proper attention to the bowels requires more extended treatment. The patient must have a particular time for evacuation of the bowels each day. The best time is after breakfast. The hour selected should not be varied from in the least. Here two methods may be employed. A saline laxative may be used as a substitute for the bile acids which will excite the secretions of the mucous membrane throughout the alimentary canal and also stimulate normal peristalsis.

Von Noorden claims he can cure constipation by dietetic measures in from three to six weeks. Boas finds the method successful in the most obstinate cases. The laxative elements of the food in an anti-constipation diet consists of water, salt, sugar, acids, fat and the indigestible residue of the food, chiefly cellulose. He recommends from half a teaspoonful to one teaspoonful of salt in a glass of cold water before breakfast. Dr. J. H. Salisbury,* who has had good success with this treatment, claims lemon juice, another laxative element, increases the palatability.

Diet is very important in this connection. In some patients the muscles of the stomach are weakened, in others there is a lack of hydrochloric acid. Examination of the stomach contents is often necessary to determine its condition. If the patient be taking little nourishment, there is most likely a deficient secretion of hydrochloric acid. This would favor constipation. Strychnine is here indicated as a bitter and a tonic which increases the appetite and strengthens the muscles of the stomach. One great source of constipation is lack of water in the system. The feces become dry because the water in the intestinal canal is absorbed. This may be demonstrated by measuring the amount of urine passed every twenty-four hours. The normal amount should be three pints or forty ounces. That much water should be drunk each day including tea, coffee and milk.

Bacteria being present, there is always a certain amount of putrefaction, food decomposition occurring all the time. A regular soft movement every day is desirable. This, however, does not always prevent putrefaction, especially where foods containing germs are carried into the intestines or special foods which are acted upon by the bacteria are already in the bowels. Distinction should be made between normal fermentative decomposition of albumin brought about by the action of gastrointestinal secretion and putrefactive decomposition of the same albumin due to putrefactive microorganisms which gain access into the bowels and exer-

*Habitual Constipation. The Alkaloidal Clinic, August 1905.

An Oregon doctor says his dividend from a life insurance society has increased from $1.29 to $1.33. Saved on examiners' fees?

Calculus impacted in Urethra: Place a ligature behind calculus and dilate urethra with fluid.—*Med. Record.*

cise pathogenic action. Absorption of these products into the blood sets up the symptoms already enumerated. The necessity of counteracting this putrefactive decomposition of albumin in the small intestines brings the practician face to face with hepatic insufficiency.

Third, by hepatic insufficiency is meant liver inability to perform its function. The causes of hepatic insufficiency have been conveniently classified by Abbott* under three heads, viz.: (1) mechanical, (2) infectious (parasites), (3) toxic. From my personal experience, I am inclined to add a (4) arrested development of the organ. When any one or all of these causes exists, it is not to be wondered that autointoxication takes place. The intestinal tract at all times contains bacteria, many of which are toxic. Decomposing albuminoid substances which often become putrefied and poisonous pass *via* the portal system, through the liver, which is constantly exposed to their toxic influences. The function of the liver is to restrict or prevent putrefaction, which is accomplished in three different ways: (1) By sending bile into the upper portion of the small intestines capable of destroying putrefactive bacteria the entire length of the small intestines, but more particularly the upper portion. (2) It destroys the albuminoid products already decomposed, this preventing them from entering the circulation only in an innocuous form. In this manner they are eliminated chiefly through the kidneys without pain. (3) The liver is an excretory organ in that it sends back into the bowel non-toxic material which was originally toxic when passed into the liver. The liver therefore is a secretory as well as an excretory organ. This paper deals with the liver as a secretory organ alone and with what takes place when the secretion is affected or changed in character.

The bile acts in four different ways: First it stimulates peristalsis of the small intestines; second, it regulates the degree of fermentation; third, it assists in emulsification and saponification of fat globules in the intestines; and fourth, it destroys putrefactive bacteria.

The poisons generated in the intestinal tract are gathered into the portal system and carried to the liver cells by the capillaries. For a time these cells can dispose of the toxins by destroying them. If the stream continues to flow faster than the capacity of the liver can exercise its disintoxicating function, it becomes impaired. The bowel poisons then enter the circulation.

Deficiency of bile, whether due to tired-out liver cells or arrested liver development, will cause retention of waste products, constipation and putrefaction with resultant autointoxication. Waste products of general metabolism must also be considered with those poisons from the intestines which bring about toxic effects.

When the liver cells, exhausted, can no longer perform their functions normally, the poisons brought to the liver through a network of lymph and blood vessels from the general circulation can no longer be converted into innocuous end-products, urea, uric acid, creatin, etc., but are carried into the general circulation unchanged. These toxins together with those from the intestines produces self-poisoning if not quickly eliminated through the kidneys.

Putrefactive changes in the intestines are indicated by the flatulency of the stomach and bowels; acid stools with considerable odor and distended stomach and bowels. These in turn indicate hepatic insufficiency or liver inactivity, causing all the symptoms enumer-

*The Alkaloidal Clinic, December, 1904, page 1251.

Ontario Medical College for Women is to be closed; the ladies preferring coeducational institutions.—*Med. Record.*

German writers attribute the failure of their athletes at the Olympian games to their use of beer.—*Med. Record.*

ated. Indicanuria is a positive proof. Indican is derived from indol, a product of albumin putrefaction in the small intestines. Indican is a colorless, syrupy, bitterish derivative also obtained from indigo plants. Other poisons in the urine, sweat and saliva demonstrate further toxic substances from the intestines circulating in the blood. The toxic products circulating in the blood affect the heart and cause a high blood pressure. High blood pressure together with toxic products circulating in the blood set up inflammation in the alveolar process and gingival border; the alveolar process first, because in the gum tissue under high blood pressure, the tissues being soft, arteries can and do expand and the tissue recovers as soon as the cause is removed, and because the arteries running tortuous through the bone cannot expand, hence blood pressure and toxic products cause inflammation and absorption of bone tissue without restoration. Hence the term "interstitial gingivitis" (deep-seated inflammation in the alveolar process). Cardio-vascular, nervous, hepatic and renal diseases as related to interstitial gingivitis are therefore due to the same cause. In relieving or removing the cause of interstitial gingivitis, the other symptoms and diseases are relieved and vice versa.

In interstitial gingivitis due to autointoxication the best results can be obtained by cleansing the body from decomposing and foreign substances and placing the eliminating organs in a healthy condition. The mouth should be cleaned up, the bowels down, the internal organs inside, the skin outside, and kept clean.

In prescribing for autointoxication note the symptoms and then apply the indicated remedy. There are marked differences in susceptibility to drug action. No two are alike. The child does not require the dose of an adult. No two have the same symptoms. The heart, temperature, and to all appearance, the bowels, are normal, yet groups of symptoms show that waste and repair are not in harmony. Dosage therefore varies considerably. A lean, active man who eats little and is abstemious requires different dosage from a fat man of full habits leading a sedentary life with unhygienic habits. To prevent over-dosing or to give just "dose enough," as Dr. Abbott calls it, the stomatologist should fix his mind upon the results he wishes to obtain and give a minimum dose at intervals until these are obtained.

Autointoxication is due to putrefactive changes in the intestines arising from a want of sufficient bile to cause peristalsis and destroy the bacteria. Urinalysis demonstrates exactly what is taking place and what is required in the way of treatment. In connection with a retention of toxins such symptoms are observed as loss of appetite, headache, loss of memory, vertigo, insomnia, tinnitus aurium, general nervousness, biliousness, irritability, weakness, cold extremities, melancholia, impotence, malodorous breath, leg cramps, twitching of muscles, muddy complexion and many other symptoms.

Treatment must be discussed in the manner already mentioned. First, as to the senile stage or tired out eliminating organs. The first indication is to remove the cause and cleanse the bowels. This may be accomplished by flushing the bowels with soap and water once or twice per week, restoring the tonicity of the bowel muscles by massage. A saline laxative upon rising in the morning, once or twice per week, is likewise beneficial. In minor ailments, such as above mentioned nothing is better. Cleansing the alimentary canal of all fermented and putrefactive material keeps the mucous membrane clean and the blood pure, which is always the great source of health.

In certain uremic cases the potash may represent twice the usual proportion of the toxicity, or two-thirds.—Bouchard.

Urinary toxicity is represented by potash 21, soda 30, lime 10, magnesia 7, urea 63, organic substances 140 parts.—Bouchard.

Since putrefactive changes in the intestines and non-destruction of waste products are largely due to hepatic insufficiency, the liver now requires attention. A remedy that will stimulate the liver and cause a flow of bile may be selected from a half dozen or more preparations. A few will be named in the order of their excellence. The dentist should try all these drugs and methods upon himself to note the results. Calomel may be given by itself or in combination with podophyllin, soda, ipecac, etc. Given alone it should be prescribed in 1-12 to 1-6 grains every hour until one grain is taken. This is to be followed with a saline laxative. Podophyllin (may-apple, mandrake) has good results, but is slow in acting, though a direct and positive hepatic stimulant. It acts upon the glandular system of the alimentary canal. In small repeated doses it produces ptyalism. As a hepatic stimulant, it requires four to eight hours for action which may last from one to two days. This drug should be taken in small doses 1-12 to 1-6 grains hourly until 1-2 grain is taken, to prevent griping. A little sodium chloride will aid its action and will not leave constipation in its wake. Podophyllin should never be given in large doses. Calomel and podophyllin may be combined with excellent results. Dr. Abbott* recommends the following: Calomel, gr. 1-6; podophyllin, gr. 1-67; rhein, gr. 1-6; capiscum, gr. 1-134, together hourly from six to ten p. m. A saline laxative is used next morning before breakfast. I have used the following prescription with good results: aloin, gr. 1-25; strychnine sulphate, gr. 1-500; atropine sulphate, gr. 1-2500; emetine, gr. 1-500; oleoresin capsicum, gr. 1-500; bilein, gr. 1-250, three to five to be taken after meals and at bedtime. In prescribing either of these, a good saline cathartic should be taken the next morning upon rising to flush the intestinal tract and remove the accumulation that has caused the decomposition. Flushing the bowels with a saline laxative at the proper time to cleanse out the intestinal tract is imperatively indicated. If this be not accomplished when digestion and absorption is re-established excretory material will again be taken up by the portal system and the condition desired will not be obtained.

If the stools are still unhealthy and putrefaction is not removed, administer every two to four hours, two or five grains of the compound lime, soda and zinc-sulphocarbolate. This should be given until the stools become normal in color and odor.

To stimulate the liver, some of the bile acids may now be given. Bilein, a mixed alkaline salt of the bile acids in doses of 1-12 to 1-4 grain, four or five times a day is indicated. Bilein acts in two ways, it mitigates the morbid condition due to a lack of bile secretion, and stimulates to normal liver function.

The urine must now be considered. The patient (adult) must void three pints or forty ounces each day to be healthy. If the amount be less, elimination treatment is required. The normal specific gravity is from 1.015 to 1.025. The specific gravity is readily obtained by the ordinary "urinometer." As a rule the specific gravity is high when little urine is voided and low when the flow is abundant. The specific gravity is an index to the amount of urinary solids. The method of obtaining the amount of solids has been considered in another paper. The normal amount for a healthy adult is 1,200 grains of urinary solids daily. If, therefore, the amount of urine voided in twenty-four hours is less than forty ounces and if the specific gravity is high, eight to ten glasses of water including milk, tea and coffee should be taken each day.

*The Alkaloidal Clinic, July, 1905, page 662.

Uremia is a mixed poisoning by substances that should have been but were not excreted with the urine.—Bouchard.

Sources of uremic poisons, disassimilation, some secretions, alimentation, and intestinal putrefactions.—Bouchard.

Urine acidity may be determined by litmus paper. The blue immersed in urine will turn pink, if the urine be acid. If the pink paper be used and it turns blue, the urine is alkaline. The urine should normally be acid. This is but partially satisfactory, since degree of acidity alone is accurate, thirty to forty degrees being normal. When the urine is abnormally acid, a three grain lithia, sodium bicarb, or sodium chloride tablet in a glass of water four times a day is indicated. This treatment will remove the solids including the urates and free the capillary circulation of its obstruction.

If the patient be over forty years of age and absorption of the alveolar process has been severe, it is advisable at first to have a complete urinalysis to anticipate more severe lesions, such as diabetes, Bright's disease, casts, etc. If these conditions exist the patient must return to his family physician for treatment, if they do not exist the simpler methods as mentioned in this paper may be adopted by the dentist. The treatment which I have devised will relieve the distention and pressure of the blood vessels in the alveolar process as well as in other parts of the body. This treatment is based upon years of original research on etiology.

After the preliminary treatment, the patient should be given a complete change. If well to do, send them abroad; if they live in the interior send them to the sea shore; if at the sea shore to the interior or mountains; if in the south, north and *vice versa*. Usually these people cannot stand cold weather; a warm or hot climate is beneficial. Hot springs and baths are always indicated. If they cannot afford to travel, let them take Turkish baths and drink hot water. Massage is also indicated. Usually these people are high livers. Restriction and change of food is necessary. Patients should be placed upon coarse, simple food and reduce the amount. This will cause peristalsis and the bile acids can take care of the waste products. It may be necessary to change from a starchy to a nitrogenous diet and *vice versa*.

The patient must return to the stomatologist in some cases as often as two weeks to six months to have the local irritants removed and be advised. If the teeth can be preserved "until death do us part" we shall have received our reward. There are many details in relation to the treatment but time will not permit further discussion.

I cannot close this paper without condemning certain manufacturers, who for financial reasons force upon the dental profession, effervescing and other preparations to neutralize uric and other acids, entirely ignoring the cause, uric acid not being a cause but only an expression.

Chicago, Illinois.

MASSAGE, BATHS, SUGGESTION AND OTHER LINES OF TREATMENT WHICH SHOULD BE RESCUED FROM THE QUACKS.*

BY P. W. RANSOM, M. D.

IN taking the topic I have for our consideration at this time I have no excuse to offer. I believe, that physicians have not given the rational lines of treatment by baths, massage, suggestion and other forms their due place in the handling of their cases. While we have recognized some therapeutic value in many of these lines of treatment, yet

*Read at the Galesburg meeting of the Tri-State Medical Society, June 1906.

Evacuants? It is difficult to admit that diminution of urine already too little, is a useful procedure.—Bouchard.

Digitalis should not be used indifferently at all periods in treating diseases of the kidney.—Bouchard.

so have they become associated with the more ignorant class of would-be "healers" that they have been neglected; also the very fact that special study, which, today, is very deficient in our medical schools, is necessary to learn of the true merits in these forms of treatment; also when we take up this work it means more than merely writing a prescription for some drug, it means actual work and effort and time on our part, or to know that the attendant is intelligent enough to carry out our wishes, provided, again, that we ourselves know how to accomplish results by these different forms of treatment, the same only to be understood by our own previous knowledge and study.

In taking up this almost drugless healing we are stepping into a field full of possibilities and the pathway grows brighter the farther we progress.

In the brief time assigned me I have no opportunity to go into detail and must make my remarks only in a general way:

We all think we know what a bath is and how it should be taken but were you to know the class of work patients coming to the sanitarium have been advised by their physicians to receive, you would soon know that more intelligence in these simple matters with their definite and positive results is greatly needed; and, indeed, it is to get into the way of using simple things instead of relying on the more complex use of drugs, that should be the wish of every physician. Were we to spend only a part of the time necessary for the study of drug-action on the use of water in its various forms, our knowledge of a bath would be of greater use to us than the handling of drugs in very many instances.

When a mental case can be soothed to sleep by simple immersion in a tub of hot water for some time, when rise of temperature will be controlled by baths of different degrees, when inflammation in any part of the body, cranium, thorax, abdomen or joints can be benefited by baths or compresses, the pain relieved and congestion controlled to more or less extent, when high injections of hot normal solution will apply heat and fluid in grave conditions of shock, when we can restore tone and vigor to the system by the cool morning sponge and brisk rub, when in all these instances and many more, by the simple use of water on physiologic grounds, it does seem to me that hydrotherapy does offer us a safe and very efficient agent, and that to ignore the same shows a lack of interest in simple things that we may study the more complex lines of drugs.

Again in massage, with its wide meaning of any form of manipulation with or without the aid of mechanics, we have an agent that is pushing hard for recognition by the general practician; but too often does he say that he is above the class of people that are called "rubbers." Let me say right here that to arouse from our semi-comatose condition and *do* things, instead of relying on our drugs to do them, will accomplish a double purpose; first to manipulate the patient will be of great benefit to him; and secondly the effort we put forth, the brisk activity displayed in performing the treatment energizes and strengthens the one giving the massage. Not only that, but it will develop a tactile and resistive sense in us that will make our every touch of benefit to the patients and carry assurance to them that will inspire their confidence. To properly carry out this line of work we must know what is wished to be accomplished.

We generally think of massage as something to build up the tissues of the body, which is true; it also improves the circulation and can be used to remove surplus fat, to relieve pain and swelling, as can be demonstrated in some of the most painful joint inflammations. Beginning with a

When the kidney becomes impermeable to toxic body products it is as impermeable to therapic toxins.—Bouchard.

Digitalis increases the quantity of urine chiefly when there are cardiac disorders associated with nephritis.—Bouchard.

soothing, gentle passing of the hand over the part, after a while more pressure will be tolerated and enjoyed, until deep, steady pressure will be employed, relieving the congestion and pain greatly. If time were given I would be pleased to more fully take up this, one of the oldest and best founded lines of treatment. In the salt glow do we possess an agent of great merit and yet quite easily and quickly administered. It consists simply in taking a patient from a tub bath and with common barrel salt, moistened, to go thoroughly over each part of the person, bringing on a glow or redness of the body, relieving greatly internal congestion. It is very conducive to sleep in those cases of insomnia due to mental overwork. Indeed, it is quite a refreshing and invigorating treatment.

The hot air bath is one of the most strongly recommended treatments and contains great power for good or ill as it may be rightly or wrongly used. We can have no stronger ally for certain conditions than this hot air form of treatment, which may be used in conjunction with the salt glow or other forms of bath work. Especially is this serviceable in rheumatic and neuralgic conditions; in the latter disease high temperatures of 300° F or more will sometimes accomplish results not obtainable by other methods. Certainly for opening the sweat glands of the skin and for a general cleansing effect nothing can surpass a cabinet or hot air bath.

It will be impossible for me to mention all the different forms of treatment coming under these different headings, and I will now pass to the psychologic lines of treatment, the first of these being "magnetic healing," so called, for in fact there is no magnetism given from one person to another even if the subject does say that he feels the same being given him. It is simply a psychologic effect of the impression one mind can bring to bear upon that of another; it comes in the category of expectant attention and has the same basis of action as the wonderful workings of the planchet. That cures have been effected by this means cannot be gainsaid, and it is not unusual to find quite a number of people believing thoroughly in its manifestations.

While not wishing to cast any reflections on the Holy Scripture by quoting from the same in this connection, yet do we find in them the statement that if we have faith even as a grain of mustard seed we can remove mountains; and today do we find with increased mental development more of the workings of faith cures, Christian science and large numbers of different forms of mental treatment. Now we as physicians not only must recognize these factors in the hands of others, but we are ourselves constantly using the same influences in our attitude toward our patients, and indeed it is the physician's personality that makes for success rather than his great learning; not that I wish to be understood as belittling the education of a physician—what I wish to convey is, that with education and no strong personality the chances for success are very limited, whereas with a recognition of our strong personality with limited education the chances of success are much greater.

We must recognize the working factor in the different forms of mental treatment as carried on today. We must give proper credit to faith cures and to Christian science. To show the strong working factor in Christian science, can we in our profession find a single person or even group of persons that have the influence of Mrs. Eddy in the one factor of treating disease? These are facts that we cannot cast aside and, as before mentioned, with the increase of mental de-

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Prudence does not consist solely in the use of small doses; we must use sufficient doses to produce effects.—Bouchard.

Uremia: Doses should be small enough to permit safe stopping if there appear intolerance, nausea, vomiting.—Bouchard.

velopment do we more strongly recognize the power of the mind over the body. We note the results obtained by the homeopathic treatment, and even in our larger medical field do we recognize some factor that reaches through us to our patients and that frequently surpasses the actual medical treatment, our personality. Dr. Parkyn, of Chicago, has gone clear over the fence, and with his treatment by suggestion does he clearly show results that seem exceedingly marvelous in the public mind.

As a man thinks so is he, is the governing factor in this class of work, and in experienced hands does it bring great results. In handling certain forms of mental conditions, melancholia and the like, if I can suggest a stronger line of thought than the one that has taken possession of them, together with correcting any physical disorder, generally of the alimentary canal, do I feel quite certain of good results. Indeed the suggestive line of work enters quite largely in my treatment of the nervous and mental conditions.

I take the magazine called "Suggestion" published by Dr. Parkyn, and while I recognize that there are some of the worst forms of treatment allowed representation in it, I do also know that there are some grand ideas along the mental line that do me good. Take the thoughts or suggestions that are put in bold faced type as they appear in the journal, one of which is, "Who does your thinking?" You cannot read such a sentence without giving it more than a passing thought, it sticks to you, it suggests something, it will give you beneficial thoughts.

Thus it is with our work among our patients; give them a working thought respecting their individual disease, some inspiration, something good, and the results will be very satisfactory both in the benefit to them as regards their trouble and their increased confidence in us. These mental lines of thought and treatment have come to stay and we are forced to recognize them and handle them in a way that will relieve them from the stigma of charlatanism and place them among our stronger agents in the care and treatment of disease.

Dr. Tuke was an early worker on these lines and most beautifully and clearly has he outlined this field of work, but while we have quietly recognized the power there is in mental treatment it has been left to the ignorant and the religeus sects to strongly embrace and publish loudly to the world marvelous results obtained from its use. What I do wish is that all forms of treatment of merit that now rest largely in the hands of those outside of the profession be stripped of the pretense and put upon the true basis, all superfluity of claims be removed and the real and true power placed on a clean basis and used intelligently by the profession.

We may not wish to be classed as "rubbers," "magnetic healers," "Christian scientists" or "faith curers," but we must recognize the grain of truth in all these things, and it is my conviction that it is due us as a profession to not ignore the drugs and surgery, but use them only where natural and simple methods, both mental and physiologic, will not accomplish the desired ends; and while we may not, as do some of these different sects or manipulators, make one factor to cover the whole line of treatment, curing every form of disease, we will be surprised to learn how few drugs will be necessary if we will understandingly use these other factors in the treatment of disease.

The public are easily moved by the marvelous and in great numbers will they throng to the new and wonderful, showing very strongly the mental influence these things have. We aim to use no hocus pocus, but

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Digitalis is inapplicable in that form of uremia which is characterized clinically by gastrointestinal accidents.—Bouchard.

We may empty the portal system into the general circulation, raising its tension and thus increasing renal action.—Bouchard.

square work, and I certainly would not be understood as suggesting that we resort to this form of work, neither would I have you think I was inviting you to a lower grade of work, not placing you alongside of the charlatans and faith curers; but I do feel that they have taken small portions of some of our grandest things, for there is a grain of truth and merit mixed with their work, and incorporate with their marvelous enshrouding.

We should rescue these good things and use them in a legitimate manner, and advance the profession by recognizing the good there is in simple hygienic, physiologic and mental treatments. There can be no grander work than practising medicine on these lines. They are the simple and plain laws of living and keeping well, and in disease so modifying them that they will correct the trouble, they are great powers and we must study and use them intelligently. It means an education of ourselves and our nurse attendants along certain physiologic and mental lines, that we have not studied in any systematic way, but in which I am pleased to note a greater interest by the profession. The work of Battle Creek, with the great work from the pen of Dr. Kellogg, also the hard study by Dr. Baruch on hydrotherapy, the different works on massage and mechanical treatment of diseases, and the pioneer work being done in mental or psychologic treatment, not only of mental conditions but the larger field of the influence of the mind on the body, also the great working factor of public opinion strongly leaning toward these different forms of treatment, demand of us greater thought along these lines.

In order to show the hold these lines of treatment have on the people take an illustration from my own town of 40,000, and as fine a line of physicians as could be asked for, the heaviest depositor in our banks is a "magnetic healer" using also osteopathy and massage; he has a large corps of attendants and not only treats patients, but, for a certain consideration, is educating numbers in his line of work. This place is run for the gain there is in it.

Now let me refer you to another instance, based on a broader and more philanthropic line, and the bare mention will thrill you with admiration and respect as concerning one of the prime movers and most progressive workers along this line. I wish to call your attention to an institution that is widespread in its influence and showing so very strongly the results of right living and hygienic treatment, and if it can make the record it has for itself I can see no harm in our adopting the same lines of treatment in our private practice. It may call for more of our time or a corps of nurses educated on these lines. We are apt to recognize the good they are doing, but too often hesitate for the reason that we do not thoroughly understand this method, and it means work instead of pills. I refer to the Battle Creek Sanitarium. This institution, and others working along these lines, are interested in the betterment of mankind, and we must recognize the high place they are taking in the mind of the public.

Not wishing to detract from this institution but to show the work being done along the mental or psychologic lines, I have but to call your attention to the work of Mrs. Eddy with Christian science. They are both moving factors in the world's thought today. Public opinion is the basis on which they rest. Battle Creek, by hard effort, has made a record for itself that will be enduring. Christian science today has a stronghold on the faith of thousands of its followers; thus the mental and physical are swinging out into larger circles, and

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Cold enemas contracts the portal tract and empty its blood into the general circulation, raising its tension.—Bouchard.

I have seen grave anuria disappear after the use of cold enemas; cool drinks also contract abdominal vessels.—Bouchard.

let us recognize the good in each of them. The recognition of physiologic right living will, if used, be of the greatest benefit to mankind, but when from any cause we do become afflicted we should aim to understand the morbid or pathologic condition and endeavor, by physiologic efforts and means so far as possible, which are in the main simple, to reinstate a normal condition.

To this let us add the inspiration of thought along right lines, the strong psychologic factor that can do so much good or harm, in the way we think. What better, more simple line of treatment could we ask for?

Our ills are quite often from our complex way of eating and living; let us banish everything that makes for our undoing and when we become ill use natural means for restoration. Back to the simple life and to God's ways is the call today; shall we listen to the same and study and work on these lines more and more? It is my belief we will.

Rockford, Illinois.

THE ROLE OF DRUGS IN THERAPEUSIS: A STUDY IN BIOLOGIC MEDICINE.

BY JOSEPH CLEMENTS, M. D.

IN the science and art of the medical profession drugs form the chief of the armamentaria, and specifically, they are designated "remedies," "cures," etc. They are said to have "specific action," and the action of drugs is further particularized as being physiologic, therapeutic, prophylactic, lethal or poisonous, etc. Some drugs are said to be "inert" or at least inert under certain conditions.

In the general designation, "armamentaria," other factors besides drugs are included such as electricity, muscular vibration, hydropathy, massage and osteopathy, organo- and serum-therapy, with the so-called faith cure, Christian science, etc. These are all alike medical agencies and have their ultimate effects upon the vital or organic functions, a sovereign reason for the demand of equal qualification for their use or practice for the so-called "healing" purposes. The life processes are influenced and modified by the use of these agencies. Some are more effective for good or evil than others, but all alike effective in their measure.

This discussion is primarily and particularly in regard to drugs, but will include largely the whole armamentaria, and for the reason just stated, that their ultimate effect is upon the vital functions.

The action of drugs is primarily and simply *chemical*. It is a question of chemistry as a department of physics. Of course the divisions of chemistry into inorganic and organic has large influence in the conception and interpretation of chemical phenomena, and will need due consideration.

Simply, then as a basic principle, drugs are purely chemical matters and their action is chemical; it can only be this. Other factors or agents in the therapeusis are of the same general nature and the part they play in therapeutic phenomena is along the same lines. In physiologic functions, especially the nutrient process, it is not so. The external factor, the nutrient proteid, has a different and quite specific role to fill, and by no means the same as is induced therapeusis.

Should a drug be "inert" it would have, it would initiate, no chemical action in its

Milk is one of the most powerful medicaments we can oppose to uremic accidents, not only to albuminuria.—Bouchard.

Urea, capable more than any other body, of inciting urine secretion, combats uremic accidents by forcing the renal barrier.—Bouchard.

new environment, though this is not what is usually meant, exactly, when drugs are said to be "inert." Inertness is usually meant in the larger sense, only possible when the chemistry of the drug is considered in its association with the organic process in general.

When certain chemical substances come into juxtaposition with other chemical matter there must take place a species of "action at a distance" (notwithstanding that Michael Faraday maintained this as impossible) and this from the fact that only on this juxtaposition, and because of it, chemical reaction sets in. And this means first of all a breaking apart of the molecules of each chemical substance prior to their change in conformation, and before the recomposition is effected. The preliminary condition is disintegration, the result of "action at a distance" of the respective compounds, before reintegration and the new composition found after the reaction is completed. Thus these chemical matters must have "acted" upon or influence each other in a sense "at a distance." Of course the temperature, and "medium in space," or other factors due to the new environment of the ingestion of the drug would play their part in the initiation of the reaction process. But the whole phenomenon could not be satisfactorily accounted for, ignoring this "distal" influence on attaining juxtaposition.

When drugs "act," therefore, they act chemically; no other action is open to them, their properties limiting them to this in themselves considered.

In viewing their larger relation to and cooperation with organic function and processes the division of chemistry into organic and inorganic, and *organic* as to the *phenomena* rather than the *factors* or *matters* involved, is forced into the field of observation. Organic chemistry is taught as that class of chemical phenomena in which the element carbon and its combination give specificity to the reactions and processes. Carbon is an inorganic element, and in itself and in the multiplicity of its combinations and reactions alone gives no countenance to the designation organic. It is in the fact that the chemical reactions are in association with the organic processes that *organic*, as the classification or designation of the phenomenon is suggested, seeming to demand a "New Basis for Organic Chemistry," a further modification of that of T. Sterry Hunt.

In organic chemistry, or the chemistry of organic phenomena, the processes are in part simple chemistry, needing no other designation. This is especially seen in drug therapeusis, which phenomena are a modification of physiologic processes proper. The initiatory action in therapeusis may be simple or pure chemistry, the induced therapeusis being a modified physiologic process in cooperation with or utilizing the prior chemical reactions initiated by the ingestion of the drugs.

Organic substances are of chemical composition, as are the inorganic, but they are the product of the organic processes and functions, and these include the chemistry of the larger relationship—the true organic chemistry—or bio-chemistry.

Organic matters are of two kinds, those forming the structural tissues of the organism, and those which are the product of the processes and functions of the body—those which are only possible after the coming into entity of the tissues and organs. These, therefore, are primordial and secondary. They are, however, coincident, at least after some advancement in embryological development, and continued side by side throughout embryological evolution; and organic continuance—waste and repair keep intact

The skin and the lung cannot vicariously aid the kidney which has become incapable of its task of elimination.—Bouchard.

Vomiting lowers vascular tension, and increases skin action, both lowering the secretion by the kidneys.—Bouchard.

the embryological evolution function throughout the entire life of the organism.

The differences in the two kinds of organic matters are products, the one of the primal function, in evolution or coming into conformation of the organic tissues and organs, the other the secondary processes, the products of these organs and tissues in functional activity, and are marked and special, both in the substances themselves, and in the operations by which they are brought into entity.

The structural tissues of the organism are varied in character, and in complexity of elaboration, and withal of a high degree of stability in composition. Witness the enormously high temperature, for instance, through which the so-called living tissues maintain their integrity—nearly half a thousand degrees under some conditions. The organic matters, on the other hand, the product of the secondary functions and actions of the organs are mostly simple in elaboration, simple in chemical constitution, and cognately unstable in character. Nevertheless, this instability is not governed by the laws which operate in the primordial elaborations of matter.

In the primordial in function and formation some structures are highly complex in elaboration and in composition, and at the same time highly stable in character and property—for instance the brain substances. While again the nutrient proteids, the matters which in the animal realm are related to both the primordial and the secondary functions, though of the most multiplex and complex elaborations, are correspondingly unstable in character, that is to say correspondingly according to some classification of phenomenon and principle of conception and interpretation. These, in a sense anomalies in factor and function, cannot be without signification in the metaphysics with which we are dealing.

The distinction in *primordial* and *secondary* in both factor and function, is vital and fundamental in conception and interpretation of organic phenomena, and no correct conception or scientific interpretation is possible in non-recognition of this essential principle. *The primordial is the bioplasmic factor and function.* The metaphysics of the phenomenon require a designation even more specific than Virchow's "cellular" in pathology and perhaps more particularly, in physiology. The bioplasmic activities of the cells are the vital and fundamental, in a word the potentially sovereign agency in all organic phenomena. These bioplasmic operations are primal and potential in all the organic functions, and as soon as these cease all functional activity comes to an end.

Life or organic phenomena are *centrifugal* in kind and character—from within out. They not merely originate in the *cell*, but in the *living matter* or *bioplasm* of the cell. Whatever is organic initiates here. This function is the primal function, and all else is secondary and ancillary.

The one factor in this primordial function and process is that most multiplex in elaboration of all organic products, the human nutrient proteid.

Its elaboration begins away down in the inorganic world, and by the agency of the bioplasmic activities of the plant physiological or nutrient function. Here and in this the inorganic elements and compounds are transformed by assimilation and vitalization into the plant organic structures, which, in turn are the basis of the animal nutrient proteids. These vegetable proteids are, by a series of digestive phenomena, further elaborated and fitted for the final and highest transformation, by intussusception and vitalization into animal bioplasm, and yet further into animal structures.

The nutrient proteids, therefore, in human organic phenomena are the most elaborate

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Purgatives remove water and lessen urine, which removes 50 times more urea than the water purged away.—Bouchard.

Purgatives in uremia remove toxins from the blood and prevent the absorption of more toxins from the bowel.—Bouchard.

and most complexly elaborated of all organic products, not excepting the brain proteids.

The nutrient proteid, of great complexity in property and elaboration, and of high instability—unlike brain matter—finds its destiny in this primal and fundamental nutrient, which is the bioplasmic cellular function. This phenomenon cannot be duplicated in the laboratory, nor accounted for on the principles of simple chemistry. Numerous so-called organic substances have been formed by chemical synthesis. They are of the secondary kind and grade, for the most part. No primal products have been successfully achieved—no eggs that will "hatch," or membrane competent to osmosis. Of course it will always be impossible for synthetic vegetables and fruits to be competent of reproduction; may such serve as true foods? The doubt must take form as rather positive belief. The secret, basic in the doubt, is right here, in the distinction in the primordial and the secondary in the organic processes, the bringing into entity and chemical conformation.

Here we run counter to Prof. E. Haeckel, who gives this distinction to the brain substance. Not because brain matter evidences this, but to fit the notion that thought is a product of brain action, the old vagary of thought as a secretion—like bile of the liver. The production of the organic structural tissues is a primordial function, it has a primal agency; it is a primal process. The bioplasmic activities of the cells are the immediate agency in this. Here they are produced and put on exhibition. Absorption, or the taking up by intussusception of the nutrient molecule, and its transformation into living matter and then into tissue structures, are the *modus operandi* of this coming into entity and putting on exhibition in this primordial phenomenon. Coincident with this primal nutrient function are the secondary processes, and the secondary products of these functions.

First, and most important of these, is the elaboration of the already formed vegetable proteids, in their fitting for absorption by the cells, the product of which is the condition of the primordial function, and through it of all the rest. In connection with this and in the general organic function of digestion, etc., are the lesser processes and elaboration of the fats, sugars, acids, etc. These are the secondary functions, with their secondary products, and which issue in what might be classed or graded as third-rate factors or products, the phosphates, urea, uric acid, carbon dioxide, and other debris. These are secondary in time and lower in grade, and resultants of the functions and processes of higher significance. So that these secondary functions and products are in no sense autonomous in character and activity; they are operative and effective chiefly in conjunction with the primal potentiality.

Tissues are not "living," only as they are related to the living matter of the cells. Tissues have no life property, no potentiality to organic action. Tissues do not produce tissues. Bioplasm alone is "living" and forms bioplasm—the bioplasmic activities of the cells being the agency in the coming into entital conformation of the structural matters of the body, and at the cost of itself, and the surrender of its bioplasmic characteristics and properties.

These cellular structures are chemical in composition and character, but while the bioplasm of the cell holds and exerts the properties and the potencies of life, or organic action, all effort to determine its chemical character and composition fails, attempted chemical analysis changes and "kills" it. In proof of which is the already stated fact that increase in cellular mass of bioplasm, consequent upon intussusception of nutrient

A pound of blood removed, carries away 1-16 as much toxins as a pound of urine would remove. —Bouchard.

Bleeding may save life by instantly removing the lethal surplus of toxins that would otherwise develop fatal accidents.—Bouchard.

proteids, is followed by the coming into conformation of tissue structures in karyokinesis, with loss of bioplasmic mass, and surrender of bioplasmic property on return to cellular equilibrium in bioplasmic activity.

It should, therefore, be in evidence that the distinction is real and fundamental in the primordial and secondary, in both the factor and the operation in the organic functions and processes. On the one hand the organic tissues, marked by *complexity* in composition, and withal of marked *stability* in character; and on the other hand the lesser complex elaborations, and the lesser *multiplex* in composition of the second and third grade organic matters, their stability of character being determined on a quite different basis from that of the primordial.

The magesterial and potential role of the bioplasmic activities make this the first and fundamental principle in the conception and interpretation of organic phenomena. Thus may be "constructed an objective picture of the nature of the vital processes"(Virchow) true to life. And this because all the organic functions, and the physical processes by which they are achieved, originate in, and are dominated by the potentiality of the bioplasmic activities. That which is unique in organic phenomena is the fact that the cycle of physical activities, which in their completion is put on exhibition in the organic structures and functions, has origin in the bioplasmic activities of the cells, and in this premordialism the processes are centrifugal, from within out.

And this fundamental fact and principle I have repeated and emphasized as our only clue to the correct conception and explanation of the role of drugs in medical therapeutic interference in the organic processes. A consideration somewhat more in detail may still further clear the way and make evident the final interpretation.

Whatever of factor external to the organism that is to become a part of the body, or a factor in its processes, or to influence them, must reach or effect the bioplasmic activities of the cells. Exactly how and to what extent, and the classifications of these factors and their operations, are the matters yet in pursuit, and the study so far has prepared the way for this specific consideration.

Whatever goes into the makeup of the body substance is taken up from the external environments and in the form of the nutrient proteids. In the larger digestive function only the pure nutrients are passed on to the cells, the non-nutrients being eliminated from the organism. This ultimate or intracellular nutrient function is unique in itself, it only takes up by absorption that which is already prepared for direct assimilation by the prior process of digestion and elaboration. Is the debris in cellular metabolism anything more than the dead protoplasm, the untransformed part of the bioplasmic mass whose disturbed equilibrium initiates the metabolism and coming into entity of the tissue structures in cell proliferation?

If this be so then there must be a reconstruction of the side chain theory of Ehrlich, which provides a receptor for the taking up of "toxin molecules," a thing impossible in a scientifically, consistently constructed picture of the vital processes.

This intracellular nutrient function is not affected by *adding* the absorbed proteids to the other cellular tissues—a process of accretion, as in all chemical operations and crystalline formations, but by a phenomenon unique to bioplasmic activities, that is to say a complex process of evolution. The nutrients absorbed increase the bioplasmic mass by assimilation and vitalization and assumption of bioplasmic condition and property, the cell structures coming into com-

With 32 grams of blood we remove as much toxin as with 280 grams liquid diarrhea or 100,000 grams of sweat.—Bouchard.

Bleeding finds its chief indication in acute scarlatinal nephritis uremias, temporary in duration.—Bouchard.

position by a process of true evolution, centrifugal in character.

It must certainly be, therefore, that the entree here, and in this vital function, is solely reserved to the specifically elaborated nutrient proteids. Neither toxin nor "drug" of any kind may enter here. Nothing save that which is competent to assimilation and vitalization by means of the bioplasmic activities which are intracellular, and in centers which are intracentral, may find access and factorship here, and in this function. *This is the vital function, and everything is in interest of this.*

It follows then, that any function—and scientifically speaking a true function is solely organic in character—or process, to be designated organic or physiologic, is primarily or potentially originated or effected intracellularly; it has its initiation in these bioplasmic activities which are the sovereign agency in all organic phenomena. All the objective factors in organic processes, excepting the nutrient proteids, are external to these "centers" of bioplasmic action, and are dynamic in role, "acting at a distance," in a specific and metaphysical sense and degree. The plant physiologic processes and the animal, analogically considered, illumine this special point, and establish the principle involved.

Nutley, New Jersey.

(To be continued.)

RADICAL AND CONSERVATIVE THERAPEUTICS.

BY WINNIE M. SANGER, M. D.

TEN years ago the pendulum of therapeutic reform began to swing noticeably in the arc of mechanical therapy, and everybody tried to keep up with the supposed progressiveness by equipping, entirely, in mechanical appliances, depending for all therapeutic results on surgery and mechanical treatments; it came to be the fashion to talk of the uselessness of drugs, and to educate the people that there wasn't any dependence in drugs, whatever. Old practicians told medical students: "The longer you practise the fewer drugs you will use, and the less faith you will have in them."

Thus some of their graduates began to practise with the idea, that "the practice of medicine is not a science, or even an art; it is all a fraud, but since the people prefer deception, what does it matter so we get the fees."

At the present time those who keep up to date with the most advanced thought in current medical literature, can plainly discern that the pendulum of progress now swings in an arc of specific and scientific therapy, which includes the right and rational use of drugs, and all other therapeutic agencies, in their proper place, with no one agency for a special "hobby" (unless we are "boosting" a proprietary panacea for every disease under the sun, which has become quite unpopular among the educated laity since the secular press has given patent and secret nostrums a publicity not to their advantage).

Dr. Osler's attack brought out many defenses of the use of drugs, and yet Osler told the physician to be rational along all lines, for he said: "The peril is that should he cease to think for himself, he becomes a mere automaton doing a penny-in-the-slot business, which places him on a level with the chemist's clerk, who can hand out specifics for every ill."

Because we have comparatively few drug specifics for diseases is no reason why we

In terminal uremia of chronic nephritis we bleed only to prevent immediate death, postponing it a little.—Bouchard.

Chloroform inhalations have succeeded in the intoxication singularly resembling uremia — eclampsia.—Bouchard.

should become empirical polypharmacists, or mechanical jugglers of expensive apparatus.

It is the faith the doctors induced in the people in "shotgun prescriptions" for years and years that drove them to patent and proprietary medicines. The old London Pharmacopeia contained many compounds of from thirty to fifty ingredients, and now such are rare curiosities. What therapeutic effect can be studied from such mixtures? What did we learn from such rational benefactors as Harvey, Jenner and Hahnemann, but to observe symptoms and give single remedies, rather than first diagnose and treat disease according to a "routine" of authority.

Hare in his "Practical Therapeutics" says: "If simplicity be not an unerring sign of the master in medicine, multiplicity of combination is without doubt the mark of the bungler and the ignoramus. It is better to prescribe powerful remedies singly. A very important consideration in regard to the combining of drugs, is that even when drugs are to be exhibited together, it is frequently better to keep them separate and uncombined, because the exigencies of the case may well require variations of the dose of the one without corresponding increase or decrease of the other."

This is a plain argument for the "active-principle" methods which we learned from our French colleagues, but how could this be done in former years with crude drugs of uncertain strength, and tinctures of questionable efficacy, so long as we walked in the straight and narrow paths of authority's dosage and prescribed treatments.

We must have working theories of therapeutics for a basis of reasoning. As Dr. Abbott expresses it:

"Therapeutic nihilism is born of ignorance in therapeutics, begets loss of confidence in drugs, because we handle something we do not know how to use. Knowledge is the cure. If we have no confidence in our own practice how can we ask others to have confidence in us? Is it a wonder that people run after so many false gods, that so many isms and pathies come and go?"

Therapeutic nihilism is responsible for Eddyism, Dowieism, Stillism, and other isms and pathies. We may go further and say that nihilism in medicine caused the ranks of the profession to be crowded and competition to become close, for when it became the rule for a rational therapeutics to be the minor part of one's course, any one could attend college, watch the surgeons and do appendectomies and ovariotomies, take a diploma, fit up an office with mechanical apparatus and with a library on electrotherapy, cataphoresis, electrolysis, sinusoidal currents, high frequency, and vibratory methods could proceed to become popular and take in the fees. It does not require a rational capability of the mind to use such apparatus, without applying medicinal remedies.

Nor am I denying that mechanical and electrical apparatus is useful and has a place, but the place is largely to increase our fees, for we have so educated the people to believe it is worth a few dollars only to have the requisite skill to prescribe the appropriate remedy, and thus the law of self-preservation caused physicians to use other means than drugs in order to be able to charge a higher fee.

Judge Green of New York recently gave us this comprehensive definition of the practice of medicine. He says:

"The practice of medicine is the exercise or performance of any act, by or through the use of anything, or matter, or by things done, given or applied, whether with or without the fee therefor, by a person holding him-

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Chloroform finds place only in the convulsive forms, never in coma; chloral the same; potassium bromide never.—Bouchard.

Never employ in uremia any salt of potash, nitrate or bromide; replace them with soda, 10 times less toxic.—Bouchard.

self or herself out as able to cure disease, with a view to relieve, heal or cure and having for its object the prevention, healing, remedying cure, or alleviation of disease."

Thus, as practicians, we are legitimately entitled to use any and all means of therapeutic efficacy, but let us not be so radical as Macbeth and "throw physic to the dogs" (for, since the days of Chiron, "physic" has helped humanity), otherwise we may cease to study physiology, histology, bacteriology, pathology, chemistry, materia medica and therapeutics, for we would have no need of such sciences. We can be empirical and follow instructions of authorities, "nothing more."

What would any of us know of drugs today, if it were not for the rational men?

While all of us cannot for various reasons, be Claude Bernard's, to find clinically the value of drugs, we must of necessity learn by experience.

Every rational practician early learns that opium, strychnine, calomel, digitalin, and quinine are not indicated in every disease. Old Alonzo Clark did much harm by his conservative advocacy of opium in bowel trouble; as a result, I believe, the great majority of physicians depended on some form of opiate, as chief in summer diarrheas, without stopping to ask if the therapeutic effect to narcotize and stop secretions is the rational one.

Now, we reason that there has been a putrefactive and fermentative change in the stomach and intestines, which has caused Nature's effort at throwing off the offender, and we assist nature by first clearing the intestinal tract of toxic material.

Shoemaker says in speaking of opium for diarrheas of children: "In infants suffering from summer complaint, enterocolitis or cholera infantum, all forms of narcotics are so dangerous as to be almost prohibited."

Pope's Rule for Diction might apply for the conservative in medicine:

> "In words as in fashions the same rule will hold,
> Alike fantastic if too new or old,
> Be not the first by whom the new are tried,
> Nor yet the last to cast the old aside."

But for the encouragement of the radical is this: "We are often compelled to respect the courage of the radical, who breaks from the traditions and faces the stinging, burning consequences for the truth's sake." Ah! there hinges the point that makes it justifiable for us all to be radicals—for the "truth's sake," but we have so allowed the spirit of commercialism to dominate our profession that we will not try anything new unless there is a financial reward for so doing.

We conservatively watch our radical and rational brothers try the value of scopolamine for a new anesthetic, and a record of twelve deaths will not deter them from further tests, since the conservative use of the older anesthetics also shows an occasional bad record.

Dr. Meltzer's twenty-five per cent solution of chemically pure magnesium sulphate into the subarachnoid space is another new method we shall watch with interest.

Thus, necessity and lack of opportunity forces most of us, at times, to be conservative, but in the general treatment of disease, if we would be rational, we must have a systematic foundation on which to base our reasoning. According to the well-known outline, which I am giving below, all may think together as a routine:

The etiology produces the The physiology is disturbed by the The pathology is the result of the The symptoms are indications of the	Disease

Uremia: Milk; bleeding for certain cases; and the pathogenic therapy I have been advocating for six years.—Bouchard.

Uremia: Can we delay disassimilation by arsenic or valerian? The disease itself has arrested disassimilation.—Bouchard.

The Treatment:
- Stop the etiology
- Help the physiology
- Remove the pathology
- Ameliorate the symptoms

But the remedies applied, and the responsibility, belong to each physician, as he must reason according to each individual's particular therapeutic requirements, which means not a teaspoonful every hour to two, regardless of immediate urgency, but "dose enough" of the alkaloid or active principle, which is of positive strength, every time, be it every ten minutes or every half hour. Thus there cannot be routine practice in application of remedies, for the authorities cannot see the indications of each individual as we do.

For example, the oft-mentioned pneumonia question:

Pneumonia may present with a delirium, full, strong, bounding pulse, pulmonary hyperemia, the sthenic type; or the prostrated type, with feeble, thready pulse, laboring heart, low muttering, overwhelmed nervous system—the asthenic type, where debility and toxemia are so evident.

The same course of treatment for each type because it is pneumonia? Or single remedies to meet particular indications, or groups if need be?

The empiric doctor is always too conservative, he is afraid to use remedies, and talks of clinical observations, saying "seeing is believing" is the only way to obtain knowledge, thus denying the power of God's best gift to man—his reason, which the rational physician uses from the cause to effect, tracing from histology of tissue to pathology of the disease, and from physiologic processes to therapeutic indications.

Pathology causes us to inquire, "What do we know as to the effect of drugs on diseased tissues?"

"Our doubts are traitors and make us lose the good we oft might win, by fearing to attempt."

If we cannot answer the query, should we sit quietly by with an "expectant plan" and expect the same reward as the radical man, who actively intervenes with the selection of a remedy to meet individual requirements?

When we know that the secretion of bile and other digestive fluids is suspended in fevers (hence the old rule "starve a fever") is it not proper to restore to normal by supplying the intestinal antiseptic now lacking, because of the inactive liver? And in inflammations where the circulatory equilibrium is disturbed, showing an excess in one part and an anemia in another, shall we not restore the balance, so that the diapedesis of white cells and extravasation of red corpuscles cannot take place? By increasing the tonicity of the dilated vessels, or relaxing the empty contracted ones, by giving the powerful vasomotor tensors, or vasomotor relaxants, chief of which are veratrine and aconitine; or hydrotherapy may accomplish the same externally applied.

The *American Therapist* says both the vasomotors may select at the same time; thus each fever may require special additions, as quinine in malaria, salicylates in rheumatism and antitoxin in diphtheria.

Since the study of materia medica and therapeutics, which most entitles us to our degree, has been placed so early in our course of four years, before any clinical experience teaches us to be rational by the time we are ready to practice, our working knowledge of remedies is entirely empirical. We must take the word of authority, consult the Pharmacopeia, or by being so conservative may never do any harm, and being always on the safe side may claim success, and at the same time get no effect from drugs, then assert they have no curative

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Uremia: We can diminish the formation of bile—milk, if it does not constipate; salts wash it away; charcoal absorbs.—Bouchard.

Shoemaker prescribes strychnine and acid nitromur. with pepsin glycerite for psoriasis, with eliminants.—*Medical Bulletin.*

effects—we must depend upon electricity, suggestion, water or surgery, for results and for fees.

The radical man is always looking out for some other man's rational idea in medicine or surgery, while the extreme conservative stands in the rear of past experience and progress.

As to which gets better results, one has only to read the authorities of 1600 and 1700, and contrast with present methods, to see that progress has made radicals of us all.

Thus it is that the sentiments of the people depend upon the educative influence of their physicians. Shall we be so radical as to cease giving medicines, or so conservative as to hold to all that which is good, test the new ones, and using mechanical apparatus as accessory remedies, according to the dictates of a rational conscience for the truth's sake—rather than for Mammon's?

Did you ever query why warts could be "charmed?" That is, what is the therapeutic agency thus acting? Have we tested suggestion, mental therapy, or whatever you may call it, after reading Bain, Hudson, Schofield and others?

Our own experience calls for more and more of a knowledge of physiology, in order that we may know what are the laws of action, limitations and powers of mind.

Who denies the mental origin, wholly or in part, of these functional diseases: hysteria, dysphagia, paraplegia, hemiplegia, phantom tumors, aphonia, convulsions, sleeplessness, constipation and emotional excess altering the character of milk, sweat and urine? And this list of organic diseases, wholly or partly produced by mental influences: granular kidney, diabetes, hemoptysis, cancer, jaundice, infectious diseases from fear, cholera, anasarca, apoplexy, angina pectoris, eruptions and death itself, a familiar example being in the death of the Wichita surgeon a few years ago, when he cut the carotid artery in a tonsillotomy?

The regular practician may ignore the consideration of mental therapeutics but quacks do not, for all who cure without drugs use mental therapeutics to effect a cure through the powers of the unconscious mind, as did the priests of ancient Egypt and Greece, so it is not remarkably radical for some of our own schools to maintain a chair of suggestive therapeutics, which was understood in Shakespeare time, as his doctor in "Macbeth" thus discusses Lady Macbeth's treatment: "More needs she the Divine than the physician," and "therein the patient must minister to himself."

Let us apply common sense, educated, illuminated, unprejudiced sense, at all times, and in advocating a return to a rational medicinal therapeutics let us include psychotherapeutics to effect as a part of rational treatment, if indicated; for whether unconsciously or not, we all use it. We know that the fee has a distinct psychic significance, for we are accustomed to value an article according to the cost of obtaining it. Credit the osteopath one on this count.

Are we not prone to let competiton make us narrowminded, lacking the spirit of justice exemplified by the Great Physician, who did all for the Truth's sake.

Our best judgment and reason should permit us all to use and apply any remedy, medicinal, mechanical or mental, whenever it is indicated to be used, for such guides, when properly educated, seeking wisdom and truth, will not lead us astray—too radical or too conservative.

"First to thyself be true, and it shall follow, as the night follows day, thou canst not then be false to any man."

Oklahoma City, Okla.

Uremia: Increase the free oxygen and you moderately increase disassimilation, whose products are less toxic.—Bouchard.

Uremia: I have seen exposure in compressed air diminish by one-half and more the urinary toxicity.—Bouchard.

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SPECIAL EXERCISES FOR SPINAL DEFORMITIES.

BY WILLIAM M. BEMUS, M.D.
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THERE are a large number of diseases and deformities which can be greatly benefited by a proper course of physical exercise, by suitable massage and manipulation added, in cases of spinal disease. It is the object of this paper to treat upon the proper and special exercises, which are suitable in cases of disease and deformity of the spine and the soft tissues lying about it.

Just at this time there seems to be a craze for physical culture and some people have become fanatics on the subject. Of course serious harm can he done by improper methods and exercises, especially with persons afflicted with disease of the spine and symptoms growing out of this condition. There are a great many different courses of instruction in physical culture offered at the present time; but none of them deals with exercises in a way particularly beneficial to spinal trouble. These exercises are therefore valueless to us who desire to benefit our patients suffering from this condition. Of course, we all realize how important expert instruction and exercise, proper massage and proper spinal support is to a large number of our patients suffering from spinal trouble, as I believe that careful statistics show that thirty per cent of the population is afflicted with curvature of the spine in a lesser or greater degree. That much benefit can result by means of providing the patient with proper exercise and suitable support in these cases goes without saying.

For a moment I desire to touch upon the subject of occupation in spinal deflection and the conditions of life and body which predispose to it. All authorities are agreed that posture is the first cause of spinal curvature, though of course injuries and a poor condition of the general health are factors in its production and are important. Any occupation which causes a bending of the head or body more to one side than the other predisposes to it; as in a child with one eye weaker than the other bending of the head results in order that the child may see the writing it is doing; or if a desk is too high or a chair too low; or with workmen carrying a load constantly in one hand, on one shoulder, etc.; motormen, engine-drivers and some other occupations in which malposture and jarring of the body take place; with piano-players and book-keepers; and various other occupations also predispose to it.

Gould advises that teachers should be instructed in the correct posture to be main-

tained. A member of the medical profession should be employed to instruct teachers in this regard. School boards, furniture makers and parents should have their attention called to the fact that children differ in size, even at the same age; and that they often outgrow the sort of seat or school desk that should conform to their size. They should also see that the light falls upon the desk at the right angle and all children should have their eyes examined by a competent oculist before attending school. If this precaution is neglected the curvature will grow worse instead of better so long as a proper position is not maintained and if curative gymnastic exercises, massage and support be not employed to prevent further trouble and restore the proper muscular tone and strength to the spine. So much can be done in the early stage, and delay in proper exercises and support work such incalculable harm to the growing child or young adult, that no expense should be spared to make an early diagnosis and get the proper treatment.

Of course all cases of spinal curvature begin very insidiously, and as I have indicated it may grow as a result of bending of the spine forward or backward, sideways or to the right or left. This position being maintained too long causes undue pressure upon the bodies of the vertebræ and produces the deformity. If the patient has a tendency toward tuberculosis, caries of the spine may result. The attention of the parent or teacher being called to the condition of the spine or, as is often the case, the lesion being discovered by a dressmaker or tailor, the physician is then called upon and I would advise that a most careful examination be made of the spinal column.

We are often called upon to make an examination of a patient at the office when we are hurried and neglect a careful examination. We should not glance at the case hurriedly and say there is nothing the matter with the spine, or that it will grow out of the trouble. The child should be stripped, should be allowed to stand in its natural position, giving it time to accustom itself to its surroundings and allow the muscles to relax. In a few moments the drooping of one shoulder will be noticed, and the space between the arms and the body will not be the same on both sides. When first taken into the presence of a physician, children very often hold themselves erect for a few moments, but after the first feeling of strangeness has worn off, the muscles grow a little tired and they will allow themselves to drop into the position which they naturally assume at home and then and not until then is a slight deformity apparent.

The examiner should allow the child to stand in front of him, holding its legs between his knees and while its knees are straight let it bend forward and try to touch the floor with its fingers. In this position the shoulder-blades fall forward and the contour of the back becomes visible so that a slight degree of rotation is thus perceptible, which has escaped observation while the child was in an upright position. This rotation is even more perceptible to the hand than to the eye. In a certain number of cases it will be found that the starting point of lateral curvature is a deformity of the last lumbar and first sacral vertebræ and that the spine bends constantly to the right or the left, at the lumbosacral junction, and one will often find tenderness on pressure at this point.

In some cases the deformity is more apparent in front than in the back. The prominence of one hip or the drooping of one shoulder may be the most prominent feature. The prominence of one hip is

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The remedial action of belladonna is dependent on the quantity of atropine each specimen of the plant contains.—Butler.

Tincture of nux varies greatly in strength, 10 minims of one tincture sometimes containing as much strychnine as 20 m. of another.—Butler.

often so marked that the flesh at times sinks in quite sharply above the iliac crest, although the deformity in the back may be scarcely noticed.

Among the earliest evidences of rotation is the inequality which almost always exists in the distance from the navel to the nipples. This is frequently observed before any marked change in the back has taken place. We also find that the breast on the side of the convexity is smaller than that on the side of the concavity. I am lead to these remarks because so many cases of lateral curvature have resulted, when the mothers have thought they noticed an inequality in the two sides of the child when it was still young, and that upon consulting a physician they were told that the child would outgrow it. I cannot but feel that I must strongly impress upon the profession the necessity of observing these cases more closely, and especially the importance of taking proper measures to straighten these incipient curves as early as possible. We all know that a child will not grow out of a curve in the spine, but will rather grow into it, and that even the slightest scoliosis will in time produce decided change in the ribs and vertebræ and that it will be impossible to ever wholly rectify the deformity unless we take time by the forelock and correct it by suitable exercises and support.

While I have mentioned lateral curvature, the same test applies to all other forms of curvature. Care should be taken to ascertain if there be an anterior curve, as this deformity frequently escapes notice. It is usually found in the region of the lumbar vertebræ, the patient appearing "hollow-backed." On the contrary the posterior or outward curvature is common to any portion of the spine and it is easily discovered. In many cases one or more vertebræ may become slightly misplaced, due to slight traumatism. This condition causes serious trouble, with the symptoms of which we are familiar. We should therefore be very careful to ascertain that every bone is in its natural position, also that no tendon is displaced, causing symptoms of spinal irritation.

Of course no one set of exercises is suitable for all cases of curvature of the spine. Each case must have individual attention, and while I can indicate in a general way exercises suitable for spinal deflection, each physician will, of course, use his own judgment as to the advisability of using any form of exercise which I shall mention, and select those which are applicable to the case in hand only.

In selecting a series of exercises, the "keynote" position is first obtained. The patient should be well instructed in this, so that it can be assumed at any time. He should stand as erect as possible, with the heels together, as nearly as is comfortable, the toes pointing slightly outward, the weight resting mainly on the balls of the feet. Shoulders and head are thrown slightly backward, the whole body is erect. The hands are now placed on the hips and the trunk stretched upward as far as possible, keeping the shoulders level. The assistant should place his hands under the arm-pits and lift upward, thus helping the patient to further stretch the spine and straighten it. The assistant should then place one hand on the ribs of the convex side, the other on the opposite shoulder; the trunk is now swayed in its relation to the pelvis until the whole figure assumes a better position. The bulging ribs are also compressed by the palm, thus rotating the bodies of the vertebræ as far as possible. The attempt of the patient to maintain this change brings into play the deeper spinal muscles and by much repetition teaches him to voluntarily assume the corrected position.

Solutions of strychnine and other alkaloids should not be kept in stock as they become contaminated with infusoria.—Butler.

Turck's experiments on dogs render it probable that the colon bacillus is the cause of gastric and duodenal ulcers.

The projection of the hip on the concave side of the lumbar lateral curvature may be helped by advancement of the pelvis on this side, causing rotation of the lumbar vertebræ, since by this motion the lower spinal region is affected while the upper remains unchanged. The object of this exercise is to stretch and straighten the weakened muscles, also the contracted ligaments and soft tissues, and straighten the spine; still more to teach the patient to gain and hold a correct attitude while walking, sitting or standing; and it is useful in all cases of lateral curvature, as well as in some forms of anteroposterior curvature, and in irritable spine, the result of pressure on emergent nerves.

It is important to study the normal curves and rotation of the bodies of the vertebræ in the normal spine, in order to understand the occurrence of rotation in lateral curvature and the reason for special exercises to overcome the abnormal condition. In this connection particular attention should be directed to those cases of so-called lateral bending of the spine which occur in all classes and conditions of youth, from general debility, in which the spine, though much deformed laterally, is without rotation of the bodies of the vertebræ. This can usually be restored by attention to his general health, by proper exercises and a light and comfortable spinal appliance, which will exert a good degree of longitudinal support without causing muscular atrophy; and this appliance is also very useful in all forms of deviation, because if there be lack of muscle-tone, or true scoliosis, it is indicated.

Dr. Seaver, of Yale, has called the attention of the profession to an appliance made by the Philo Burt Manufacturing Company, at Jamestown, N. Y., which fills the indications mentioned because it is comfortable, adjustable, and gives the necessary support without undue pressure or causing any loss of muscle-tone. This support can be easily removed for the purpose of making the proper dressings, etc., in cases of Potts's disease.

While on the subject of proper spinal support, in connection with spinal gymnastics, I wish to call attention to the fact that chairs, desks and tables can be made so that they can be changed to fit any individual and that a proper slope of the seat can be obtained. Parents and school boards should see that this is done, and the physician can indicate how it can be done. Cotton has brought this about in certain schools in Boston.

To resume our proper subject, treatment by proper spinal gymnastics: After the "keynote" position has been thoroughly learned by the patient and the correction made, a suspension of the body can be made either by a horizontal bar, trapeze, rings, or by the Sayre suspension apparatus. The patient should be taught to use the suspension thoroughly and at frequent intervals through the day. In using the Sayre apparatus the rope should never be tied but should be held in the hands of the patient, or assistant, as serious accidents have occurred where proper precautions have not been used.

In the mild form of curvature almost any of the following exercises can be readily used; the exercise in each instance being selected according to the locality of the curve. The patient lying on the back, the head should be rotated in all directions, then the arms and then the legs. When the arms are in a position above the shoulders deep breathing should be taken, inhaling; then lowering the hands gradually to the chest and exhalations made. The legs can be brought upward by muscular effort, first one, then the other, then both to a right

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A crank is defined as one who knows a great deal about a subject in which we are scarcely interested at all.

That the alimentary canal can be asepticized as an impious reflection on God's creative wisdom —V. M. Taylor, *Med. Era.* Whee!

angle with the body. The patient should then assume the first, or keynote position, then turn the body to right and left, the head over one shoulder, then over the other, heels and feet maintaining the position.

The lower limbs should be exercised, because often in cases of curvature there is unequal development of the legs and a tipped pelvis, therefore the patient should be taught to exercise the muscles of the lower limbs by placing the hands on the hips and raising on the tiptoes and back to heels several times; assuming a squatting posture, then rising; placing the hands above the shoulders, stretching the arms upward as far as possible, then outward from the shoulders, also backward and downward—all followed by standing in keynote position, and making tense all the muscles throughout the body. Drawing the stomach and abdominal muscles upward by purely muscular effort is important, as there is generally enteroptosis in cases of spinal deflection, which can be benefited by this method.

Particular attention should be paid to the muscles upon the convexity of the lateral curve, as these are the weaker.

In carrying out the treatment the patient should be placed so that the muscular attachments assume a fairly normal position and can be properly developed. The patient must assume the keynote position, then move the right leg forward about three foot lengths, bend the knee, keeping the other knee fully extended, while the trunk is carried over the bent knee. Repeat with left leg. The keynote position being resumed, take the weight of the body on the ball of one foot, swing the other in a circle about it. Repeat with the other. Now place the palms of the hands against the sides just below ribs, draw the sides as near as possible then by muscular effort as far apart. The hands on the sides act simply as guides.

Again, with the patient astride a chair, front of body facing back of chair, the attendant standing behind him now places the left hand beneath the left shoulder, slowly lifting it, at the same time depressing the right scapula with the right hand. If the curve is with the convexity to the left this pressure is to be on the left scapula and the lift be made with the right hand.

Other exercises may be taken in the prone position, on the floor, table or firm couch, as lying on the face, the feet held by the assistant, or fixed by a strap. The trunk can be raised to a corrected position. Motions may be made by hands and arms as in swimming; with the right or left sides upon the table the body can be lifted in such a manner as to improve either a right or left scoliosis.

All these exercises can be used to advantage in selected cases and together with massage and the proper spinal support indicated, all those afflicted with scoliosis of the first and second degrees, at least, will be benefited, also many cases of other forms of spinal deflection. No general practician has the right to allow any one under his care to become a confirmed cripple by neglect when the remedy is to be obtained by a little attention at the outset of the disease. Many of our patients are not financially able to go to a specialist and we should attend these personally.

The object of this paper is to instruct the general practician how to care for cases of curvature, under his own supervision, and is not for any man who is already a specialist in orthopedics.

Jamestown, New York.

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There is no good reason why so many of these cases of spinal deformity shall be allowed to progress beyond the remediable stage—and yet many of them do! It is the

Ergot increases heart vigor without slowing; the only objection is the unreliability of ergot preparations.—Dixon, *Lancet*.

Bleeding in the lung or brain will certainly be augmented by ergot; use it only for splanchnic hemorrhages.—Dixon.

duty of the practician to recognize such conditions early; that they can then be treated successfully, Dr. Bemus has shown us. This is another of those "loose ends" which help to success and which every physician should grasp.—Ed.

DELIVERY IN A COMPLICATED LABOR WITH ELONGATED CERVIX.

BY EMORY LANPHEAR, M. D., PH. D., LL.D.
Chief Surgeon Woman's Hospital of the State of Missouri.

IN *Medical Standard* for August, 1906, Dr. W. F. McBride, of Dayton, Ind., reports the death of a woman following prolonged labor from elongated cervix, the external os being pushed two and a half inches outside the vulva. Cesarean section being positively refused, Dr. G. F. Beasley, of Lafayette, a surgeon of wide experience and great skill, was called into the case and delivery of a dead child effected after many hours. The author says of longitudinal incision that they hesitated to try it because the cut would have had to be five or six inches in length "through a very vascular substance, cutting arteries of whose ramifications and anastomoses we knew nothing; this would have entailed profuse hemorrhage before delivery could have been completed—in fact, all bleeding vessels would have had to have been ligated as soon as severed, and, as the incision would necessarily have extended through the constricting band representing the internal os, this procedure was practically out of the question."

That others may not lose mother or child by reason of this fear I describe the following operation which I have successfully employed in a number of cases (such cases not being at all rare, as one would infer from the meager literature upon the subject.)

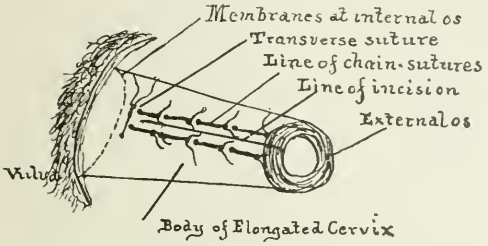
When labor has progressed to that degree that the internal os is fairly well dilated and the external os will admit the index finger, the woman is placed in the lithotomy position, a perineal retractor introduced into the vagina and strong traction made backward and to one side; the anterior lip is caught in strong vulsellum forceps and the os pulled as far outward and to the side opposite the perineal retractor as is possible. Almost the entire length of the cervix will thus be exposed, however much it may be elongated.

The retractor and forceps being held by an assistant, the index finger is passed into the cervical canal and then a large suture is inserted as near the internal os as possible and carried transversely (across the cervix) so as to include more than a half inch of the entire thickness of the cervix; the finger is withdrawn from the os and the suture tied very firmly. Then the finger is again forced into the cervix and another suture passed—this time at right angles to the first, i. e., extending from one end of the transverse suture toward the outlet, the finger withdrawn from the canal and the suture tied, somewhat "puckering" the cervix. Once more the finger is thrust into the cervix and a third stitch put in, this one extending from the other end of the transverse suture outward, parallel to the second one. After this is tied progress is easy; stitch after stitch is introduced until the entire distance from the cross-stitch at the internal os to the external os is covered by two parallel rows of sutures, about one-half inch apart and including the entire thickness of the

Squill is much more effective in constricting vessels than digitalis, acting similarly to ergot.—Dixon, *Lancet*.

Tannin, adrenalin, digitalis and ergot are worse than useless for cerebral, pulmonary or hepatic hemorrhages.—Dixon, *Lancet*.

cervical wall—thus producing an exsanguinated zone.



Retractor and vulsellum having been changed so as to expose the opposite side, it is similarly treated.

When both sides have been carefully sutured the cervix may be split between the two rows of sutures, first upon one side and then the other. As traction upon the forceps is relaxed there will always be a few bleeding points which may quickly be caught and ligated.

Labor may now be completed promptly by application of forceps, or by version as the case may demand. If the cervical artery be torn across (as I have had happen in my work) it must be caught by hemostats before and behind, and tied after delivery is effected.

After the placenta has been delivered a chain-stitch may be run across the anterior lip from one transverse-suture to the other and the redundant tissue cut away; then the posterior lip similarly treated.

When all bleeding from the cervix has been checked the vagina should be cleaned and lightly packed with iodoform gauze and a pad of bichloride gauze (1 to 2000) applied over the vulva.

Unusual care must be taken of the patient after such a confinement to prevent puerperal infection; but if douching be omitted and the vulva washed twice a day and kept covered with sublimated gauze there need be little fear even in a farm-house.

St. Louis, Missouri.

WHEN IT IS "CONSERVATIVE" TO BE "RADICAL."

BY JOHN C. MURPHY, M. D.
Professor of Obstetrics in the St Louis College of Physicians and Surgeons.

SO much has been written of late about "conservative" treatment of the uterine appendages that it has become difficult to distinguish between conservatism and patch-work. In surgery as well as in other fields of human endeavor patch-work is only a temporary make-shift which will call for more radical measures later on. Few women enjoy having themselves operated upon on the installment-plan. I am well aware that there are conditions warranting conservative treatment of the tubes and ovaries, but at the same time my experience has taught me that many patients would receive more lasting benefit were radical instead of incomplete operations performed in certain cases; this is particularly applicable to those infections resulting from gonorrhea, but those following abortion and puerperal infections at term also sometimes must come under the rule favoring radical work.

I recently witnessed several operations for the removal of diseased tubes and ovaries. In each instance the operator left the chronically diseased uterus behind imbedded in a mass of adhesions instead of removing the organ which henceforth can be of no use and which always must remain a source of danger. Personally I can not see the philosophy of leaving a diseased, functionless organ to continue as a cause of

Undrawn poultry, fish and game have been the cause of many cases of poisoning wrongly assigned to other causes.—*Lancet-Clinic.*

For lupus vulgaris Shoemaker advised arsenic, iron, podophyllotoxin and sulphur internally.—*Med. Bulletin.*

trouble for the woman (and incidentally the surgeon's reputation) when it can just as safely be removed; here it is far better to be "radical." True conservation of a woman's pelvic organs lies in the prophylaxis. Many cases of disease of those important organs can be charged to the stupidity or criminal negligence of some unclean midwife or equally dirty doctor. When we consider the marvelous change which takes place in the pregnant uterus with its increase in growth, vascularity and glandular activity, it causes us to wonder why infection of a grave character is not more frequent.

A study of the physiology of pregnancy with special reference to the uterus and tubes should cause us to consider every case of labor as an event of major *surgical* importance and lead us to treat it accordingly. If infection occurs there is no telling where it will end; possibly in the grave. It is sad, indeed, to feel that every death from puerperal sepsis could have been prevented.

But even if the woman does recover from a pyogenic infection she is frequently left with a uterus and appendages diseased beyond repair. Patients in this condition are sometimes subjected to curettage by some well-meaning but poorly informed doctor who looks upon the operation of curettage as a catholicon for all pelvic diseases; and such a doctor usually succeeds in making a bad matter worse. A more careful physician may detect the presence of tubal disease and refer the case to the gynecologist with the diagnosis of "pus-tubes," the specialist accepts the ready-made diagnosis, removes the tubes and ovaries but pays no attention to the uterus which probably needs removal as badly as the other organs. The uterus may atrophy to some extent after salpingectomy but many of the patients with infected pelves will not be cured but will continue to suffer almost as much as before, from pelvic pain, bladder-irritation, etc., and in addition to the nervous conditions incident to the abrupt occurence of the menopause, whereas if a hysterectomy is made there are only the climacteric symptoms to control.

To leave the uterus after removal of the tubes in gonorrheal infection is to consign the woman to probable invalidism, to say nothing of the danger to her husband (if she has one) from the repeated infections he is liable to. Just such incomplete operations are performed every day by men who ought to and do know better. In the charity work in some of the large hospitals the operator frequently never sees the patients until they are wheeled into the operation-room, chloroformed and ready for operation, the diagnosis having been made by the house physician or some clinical assistant. If "tubal disease" is the diagnosis the tubes are removed and no careful examination made to ascertain condition of the uterus, which is frequently so infected as to give more trouble and pain to its unfortunate possessor, ultimately, than did the original pyosalpinx. It is only by following up the history of these patients year after year that we learn that the apparent "cure" at departure from hospital was but a temporary respite; fortunately, many of these women subsequently are cured by a secondary hysterectomy—"radical" surgery.

Such work brings surgery into disrepute and prevents other women from seeking the relief they might obtain from more careful and better educated operators. I could record numerous cases in my own work and that of my friends where secondary operations of a radical character had to be resorted to in order to correct the results of

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There can be no question but that the manufacturing chemists have been of serivce to practical therapeutics.—*Boston M. & S. J.*

Graves' disease is subject to exacerbations which are of a distinctly toxemic character, active fever, etc.—Thompson, *N. Y. S. J. M.*

faulty "conservatism" or inaccurate diagnosis. How much better it is to recognize the condition and needs at once.

To briefly summarize: Prevention is the greatest conservative measure. Puerperal infection can be prevented. A man infected with gonorrhea should be prohibited by law from entering the married state; it is true, as the late Lawson Tait expressed it: "While syphilis has killed its thousands, gonorrhea has killed its tens of thousands."

Once the tubes and ovaries become sufficiently diseased to warrant removal I believe the uterus should be removed also. A functionless organ left in the pelvis acts as a foreign body and is a source of irritation. If it is diseased and adherent to neighboring organs, the resulting pain and discomfort defeats the object of the operation. In other words, the only conservatism worthy of consideration is that which puts the patient in the best condition to enjoy the pleasure of living. Lastly the surgeon should not so readily accept the sometimes incomplete diagnosis of his medical confrere but should combine the science of the diagnostician with the art of the operator.

St. Louis, Missouri.

A CASE OF PLACENTA PREVIA.

BY H. H. HOOKER, M. D.

WAS called on Aug. 28, 1903, at 4 a. m. to see Mrs. R. D., a lady 28 years old, in her third confinement; was soon at her bedside and found her in actual labor. Her face was blanched, the pulse hardly perceptible at the wrist and there was extreme exhaustion—from a frightful hemorrhage. I gave a hypodermic of strychnine, gr. 1-30 and atropine, gr. 1-100, and then made an examination. I found the os dilating and dilatable, also a placenta about centrally located over the os and grown fast all around to the walls of uterus. With the next pain there was an alarming gush of blood, showing that work must be done at once.

I passed my hand into the vagina and succeeded in pushing two fingers through the os; then began separating the placenta from the uterine wall and soon detached it sufficiently to enable me to pass my hand into the womb, when I found the head loosely engaged. By elevating the hips of patient to an angle of about forty-five degrees, I succeeded in pushing the head back, and by so doing was able to reach the feet and bring them down. I now had an attendant to give patient half a dram of fluid extract of ergot, and at the next pain delivered the child to its hips. The hemorrhage being almost stopped I waited for another pain which came in a few moments and with its assistance I delivered the child as far as the head. She was then given another half dram of ergot, after which I passed the fingers of my right hand into the vagina besides the child's neck and, putting a finger into its mouth, when a hard pain came by gentle traction I delivered the head. The cord was tied and cut at once as there was no pulsation. Turning the child over to its grandmother, who was an intelligent old lady who understood how to manage resuscitation, I gave my attention to the mother. There being quite a gush of blood—I ordered another dose of

Graves' Disease:—The acute attacks are due to mild intercurrent infections, respiratory inflammations.—Thompson, *N. Y. S. J. M*

We somewhat ungratefully forget the gloomy night and obscure dawn through which past workers painfully toiled.—J. W. Ogle.

the ergot; had the husband place a hand on either side of the woman's body and make gentle but firm pressure downward and with my fingers inside the womb we succeeded in inducing a strong pain, by the aid of which I swept loose and brought away the entire placenta. The flooding stopped at once.

I had the patient and bed cleansed and dressed in "approved style," with a broad comfortably tight *binder* about the body—the woman said she "felt quite comfortable." After waiting perhaps half an hour I gave another hypodermic, of strychnine, gr. 1-50, and atropine, gr. 1-100, and prepared a mixture of fluid extract of ergot one ounce, tincture of cannabis indica two drams, and ordered half a teaspoonful to be given every half hour, should bleeding recur. I left for home, with instructions to call me at once should any untoward symptoms arise. I called again in twenty-eight hours—found the patient to be resting well, uterus firmly contracted, pulse 80 and of fairly good volume. The patient rallied finally and was up in ten days.

The only remarkable thing about this case was that there was not a sign of hemorrhage before actual labor came on, and that there was no pain except an "uneasy feeling in left side low down" but not enough to keep her from attending to her household duties.

Inglefield, Indiana.

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The management of this case is wholly commendable with the exception of the use of the ergot. The doctor violated the absolute rule for the use of ergot—"*ergot should never be given until the uterus is empty of child and placenta*"—a rule from which there is no exception. The child could have been delivered just as promptly and well (even better) without the use of ergot.—E. L.

TWO CASES OF TUBULAR PREGNANCY WITH RECOVERY.

BY L. ETTA FARMER, M. D.

CASE I. In July, 1901 I was in attendance on a case of meningeal tuberculosis, boy two years old, when my attention was called to the mother of the child by her nosebleed and vomiting. I suspected pregnancy. The boy died on July 27th and on the 29th I was called to see the mother, who was reported dying; found shock, evidence of internal hemorrhage, etc. By heroic methods her condition in a few days improved. On examination I found tubular pregnancy of the right side, so informed the family and wanted to remove patient to the hospital but was refused. Her conditions continued to improve until she got up and walked up a hill to the toilet room, on her own responsibility, when she had a second hemorrhage and again I was summoned hastily, and again with ice, position, ergot, strychnine, atropine, etc., controlled the hemorrhage and patient was just alive. I then requested them to get another doctor as medicine would avail nothing, and declined to visit her any more. This brought them to time and they consented to removal, as her condition was as well as I could hope to get it.

She was taken twenty-six miles to the hospital and operated on the twenty-eighth day after symptoms of the first hemorrhage or rupture. On opening the abdominal cavity free blood was found in such quan-

Previous environment, through the villainies of abusive breathing air, lays the substrata defects of outworn and wasting lungs.—Swayze, *Med.*

Benedict proposes as aseptic money aluminum cards the size of a bill as usually folded, printed and perforated to prevent counterfeiting.

tities that patient was placed on side to allow the blood to run into a bucket. The six weeks' fetus was found in the right tube, opposite the rent in the tube. The rent was closed by a large clot which no doubt saved her life. The left tube was also removed. She made an uneventful recovery and now, nearly five years afterward, is well. She was mother of three children, the youngest being the boy first mentioned.

Case II. Healthy, fleshy woman, about thirty-five years old. Youngest child thirteen years old. First and only miscarriage eleven years ago. I was called March 3, 1906, for extreme pain in left side. Examined bimanually and found only tender uterus posteriorly and told the patient I was unfavorably impressed with her case, to watch and let me know her exact conditions every few days. On using speculum, I found a show of color, so told her perhaps she was going to menstruate and instructed her to be quiet, etc. She did not menstruate at all in March and on April 7th a flow began. On the 9th or 10th the decidua passed and the flow continued until May 23d when she walked to my office, a mile from her home, for medicine to stop the flow. I wanted to examine her but she wished me to wait so I gave her atropine sulph. gr. 1-250 to effect, and one Buckley's uterine tonic four times a day and told her if there was no improvement to send for me.

On the 28th I visited her and found a "bunch" in the left side of the pelvis the size of a large naval orange. Uterus large, open and a dirty brown discharge, no odor at any time. I readily passed the curet and found only bloody mucus. I told them I suspected her condition to be serious, and hence ordered them to keep her quiet and I would examine in a few days again. Then I readily saw that it was increasing. I prepared the patient and took her by train to the hospital, a distance of twenty-six miles, took her from the ambulance to the table and found left tubular pregnancy of about two months. The tube ruptured in removal. It was in the ovarian end and was very movable. The left ovary was also removed. I did not see the case from March 3d until May 23d or knew of her condition, although I told her to let me know how things were going.

On July 7th the case is rapidly on the road to recovery and unless some untold trouble arises she will soon be well.

Folsom City, California.

SURGICAL NOTES

CANCER OF THE RECTUM.

In *St. Paul Medical Journal* Dr. W. J. Mayo, of Rochester, Minn., reviews the various methods that have been devised for high cancer of the rectum and describes the operation which he practises—a modified Quenu operation, the tumor being attacked by the abdomino-perineal route. With the patient in a high Trendelenburg position, a median incision is made. The limits and relations of the tumor having been noted, the lower end of the sigmoid, at about the level of the sacral promontory, is divided between two clamps. The lower end is brought out of the wound and closed with a purse-string suture. A gridiron incision is then made on the right side and the sutured end of the sigmoid is pulled through this opening and sewed in place with three-fourths of an inch of the bowel projecting to form an artificial anus. The lower end is now

Connecticut imposes a liquor license tax on vendors of patent medicines, government license necessitating state license.—*Med. Times.*

The red-bug in Panama causes such irritation that in some cases insanity has resulted.—*Med. Times.* True; they made us mad.

closed by inversion, and the bowel is carefully dissected away from the pelvic contents and sacrum down to about the point where the middle hemorrhoidal vessels supply the rectum. The entire area is now packed with moist hot gauze and the patient is placed in the perineal position. After closing the anus with a suture, a circular incision is made around the anal margin, and the rectum is dissected away from the prostate and urethra (or the vagina) up to the point where the dissection had been conducted from above. An assistant passes the abdominal end through the perineum and the whole is removed. The peritoneal denudation in the pelvis is closed as well as possible, with drainage through the perineum. The sigmoid trap is pulled down over the exposed surface, and in the female the uterus and broad ligaments are adjusted with a few sutures to aid in covering. The abdominal wound is closed and the perineal is narrowed to the proper dimensions. The end of the colon is opened at the end of twenty-four hours. The advantages of the operation are these: The radical removal it affords; the anus placed in a position that permits easy inspection and cleansing; the sigmoid trap obviates frequent stools, and the intermuscular incision gives a fair degree of control. Mayo reports nineteen cases, of which five died in the first month. Of four cases that passed the three-year limit, two are alive and well.

DANGER OF DELAYED OPERATIONS.

Discussing the dangers of delay in abdominal cases, Dr. Maurice H. Richardson of Harvard University, in *St. Paul Medical Journal*, says: "I am deeply impressed with the direct dependence of my failures upon waste of time. It is not justifiable to waste precious moments, in emergencies waiting for symptoms to confirm a diagnosis." He further remarks that the symptoms which most surgeons regard as safe guides to surgical intervention do not appeal as widely to the profession as one would desire; the average doctor is too much inclined to hope that acute abdominal symptoms are not as serious as they appear, that a few hours will see the patient on the road to recovery; and so waits while the precious moments fly. Such tendencies exist in all communities, and are responsible for the terrible consequences in abdominal emergencies. These disasters are especially common in rupture of the intestines, spleen and liver; from general peritonitis, from hemorrhage or both. Most of Richardson's cases have been fatal owing to delay in getting the patient to the operating table or to delay in endeavoring to be sure that rupture had taken place. The most serious results frequently followed trivial injuries with insignificant symptoms at the onset, excepting pain. Many sudden disasters take place in the course of unsuspected diseases, as in acute infections of the appendix, gallbladder and pancreas; perforations of unsuspected gastric or intestinal ulcer; twisting of pedunculated tumors, intussusception and volvulus, without any premonitory signs, and if unrelieved they prove fatal. In such acute emergencies of doubtful nature it is not permissible to wait for a development of the lesion sufficient to make possible a positive diagnosis. In well-recognized lesions, which demand immediate investigation, time must not be lost. Finally, in cases in which the lesion is only suspected, time should not be lost if the suspected lesion is one essentially fatal if not promptly relieved. Time for observation, diagnosis and prognosis can be profitably taken only in that class of cases in which the lesion is so well recognized as to justify delay. Finally, he con-

Brazil's physicians are trying to break the fashion that compels all men to wear full black with silk hat in summer.—*Med. Times.*

The new departure of the *St. Louis Courier of Medicine* has greatly increased its value, as to readability.

cludes: "The one symptom that best determines necessity for operation is pain; if we look on every case of severe abdominal pain as a case which demands immediate investigation, we shall avoid nine-tenths of the terrible misfortunes of abdominal disease, and as our experience in abdominal emergencies becomes larger we shall find that the number of unnecessary explorations diminishes and the number of successes increases."

CURE OF GANGLION.

Sometimes patients will not submit to operation for ganglion. What is the best non-operative treatment? Cates says that the best treatment is injection of campho-phenol. He has never failed to effect a cure by this agent. It is prepared by mixing equal parts of camphor-gum and crystalline carbolic acid. The result is a pure white, slightly oily fluid, with the odor of camphor. It is non-toxic, having all the good but none of the bad properties of carbolic acid. To use it, the region of the ganglion should be prepared as for an operation. The preparation of campho-phenol in quantity of 15 or 20 drops should be injected directly into the ganglion by means of a hypodermic syringe, the needle of which has just been boiled. There is some reactionary swelling, but this soon subsides, and Cates claims that a complete cure is always obtained by one injection. The limb should be kept at rest on a splint, or the patient should remain in bed a few days.

DEPRESSION OF STERNUM.

Dr. S. W. Huston, of Crawfordsville, Iowa, reports the following unique case: A young business man, age 25, has depression of the sternum which includes all of the ensiform cartillage and about one-half of the gladiolus. It is quite a marked depression, being fully three inches in depth and four or five inches in diameter on the surface and gradually diminishing to about the size of a dollar at it's deepest part! He complains of constant tenderness over this area, especially over the ensiform cartilage. He is a strong and well-nourished young fellow. Have any of the readers of CLINICAL MEDICINE ever seen or heard of a similar case; if so, can they give us a successful treatment?

SURGICAL TREATMENT OF TRIFACIAL NEURALGIA.

Dr. B. Merrill Ricketts, of Cincinnati, who has had a remarkably large surgical experience, has reached the conclusions that in the surgical treatment of trifacial neuralgia (1) Avulsion of the distal branches should be the first operation resorted to. (2) Avulsion with ligation of the common and external carotid arteries should be second choice. (3) Removal of the branches of the nerve (Lexer) should be the third choice. (4) Lexer's method combined with that of La Place, and ligation of the common and external carotid arteries, the fifth. (6) Removal of the ganglion and neurectomy of the distal branches, the sixth. (7) Removal of the ganglion combined with neurectomy and ligation of the common and external carotid arteries, the seventh. (8) Neurotomy, neurectomy, or the injection of osmic acid is only temporary relief. (9) Plugging the foraminae with fragments of bone cut from the neighboring plate will prevent regeneration of the nerves passing through them. (10) The method of Kroenlein is an innovation, having given better results with less deformity, mortality, loss of time, motor paralysis and less risk of loss

Just what does the *Courier of Medicine* mean by internal antisepsis? Intestinal antisepsis is not exactly internal.

With 5 years' medical study after 1908 the physician needs 9 years to qualify. Is this justified by the income he may expect?

of vision. (11) Relapse occurs after intracranial operations, but in such cases removal of the ganglion is supposed to have been incomplete. (12) All intracranial opertions for the removal of the ganglion should be abandoned because of the high mortality, if for no other reason.

SUBPERIOSTEAL FRACTURE.

American Journal of Surgery calls attention to the fact that severe localized pain after traumatism, especially in children, may be due to subperiosteal fracture, e. g., near the head of the humerus or the femur. Extreme localized tenderness is the chief sign; abnormal mobility and deformity are absent, and crepitus may not be elicited. Dr. F. W. Garcia, of St. Louis, recently opened up the shoulder-joint of a child to demonstrate the existence of such a fracture, which had been disputed. The break was almost transverse. It was treated by suturing with chromic catgut through drill-holes.

CARCINOMATOUS PAPILLOMA OF OVARY.

This disease is not at all uncommon. In something more than 3,000 abdominal sections I have found six cases of carcinomatous degeneration of papillomatous ovarian cysts and have removed a number of papillomata of doubtful degree of malignancy. These carcinomatous cysts of the ovary may develop at any period of life; they originate in the cells of the tubes of Pfluger, as do also the papillomata of the germinal epithelium of the ovary. Histologically cancerous cysts are difficult to distinguish from simple papillomata, but can be recognized when masses of atypical epithelial elements are found. A papilloma which at first has a benign course may degenerate into a carcinomatous form. The rupture of a cystic tumor into the peritoneal cavity may pass unobserved, owing to the absence of definite symptoms; the liquid of carcinomatous cysts (apart from suppuration) is not of a septic nature—at all events the germ it contains are not pyogenic. The prognosis of every ovarian tumor containing even a trace of papilloma ought to be guarded, because it is not possible to exclude with any certainty the possibility of malignancy. Therefore the treatment should be the operative removal of all ovarian growths; but in recurrent and in very advanced cases complicated with numerous metastases it is better not to interfere, as the operation may have a fatal result.

LUMBAR PUNCTURE.

The "surgical fad" of lumbar puncture has deservedly fallen into innocuous desuetude. In an exhaustive report the staff of the Massachusetts General Hospital agrees that lumbar puncture is not a satisfactory means of relieving intracranial tension.

MOLES AND CANCER.

The liability of old warts and moles to take on epitheliomatous degeneration late in life is now so well proven that it is best to remove all such growths whenever a patient under general anesthesia for other work. and they should be removed under local anesthesia whenever they show signs of becoming ulcerated or of increasing in size.

UNDESCENDED TESTICLE.

There is no unanimity of opinion as to the most favorable age for operation nor as to the technic for cryptorchidism. One should consider the age, whether unilateral or bi-

Many men never give huge doses of quinine as an "antipyretic" and never catch on to the fact that it is acting as an antiseptic.

Forty years ago Thompson claimed to abort typhoid in 6 days by full doses of the oil of sassafras.—Kendrick, *Med. Era.*

lateral, whether pain or psychical symptoms are present, presence of complications, position and degree of atrophy of the undescended testes. The non-operative treatment consists in massage and manipulation with a view to bringing the organ into the scrotum, or a truss above the gland to force and hold it down. But as such testicles have been proved to be invariably functionless the best treatment is excision with careful obliteration of the inguinal canal to prevent hernia.

CHOLECYSTITIS DUE TO INFLUENZA.

It has for a long time been known to surgeons that the bacillus coli communis as well as staphyloccoci may be the cause of inflammation of the gallbladder and probably also of most gallstone formation; but Heyrovsky now claims that the Pfeiffer bacillus (the cause of influenza or la grippe) may also bring on an inflammation of the gall-tract.

CAUTION IN HYPODERMOCLYSIS.

American Journal of Surgery says: In performing subcutaneous infusion, do not allow too much fluid to accumulate at one area, otherwise necrosis may occur. Shift the needle to various parts not by swinging it from side to side, but by partly withdrawing it and reinserting it to another area.

GYNECOLOGICAL NOTES

MASSAGE FOR CHRONIC SALPINGITIS.

The Brandt method of pelvic massage has found an earnest advocate in Dr. Kate C. Mead, of Middletown, Conn., who saye (*Virginia Medical Semi-Monthly*): Chronic salpingitis, with retroversion of the uterus, is amenable to treament by Brandt massage. This treatment can be used as long as it causes no pain; from eight to sixteen treatments may be needed to cure an ordinary chronic salpingitis plus exudates connected with a retroverted uterus. The technic of the Brandt massage can not be taught by books, it is demonstrated in some of the larger medical clinics abroad, and has many adherents in this country. It consists of a form of spinal strokings on the body of the uterus, pressure against the adhesions to cause absorption of exudates, external massage of the fundus uteri through the abdominal wall, backward stroking on the cervix after the fundus has been placed well forward, and finally sacral percussion or vibration to cause contraction of the blood vessels in the pelvis. The internal massage is given with two fingers in the vagina. After the treatment by Brandt's massage, the patient is given passive exercise with "knee-resisting" movements, to increase the tone of the muscles of the pelvic floor and the levator ani. Following all this, the patient must rest for half an hour in the abdominal decubitus. Vibratory massage on the sacrum and over the ovaries is of great value in lessening neuralgic pains and aches in the pelvis. This treatment may be given in several ways; either by expensive vibratory machines run by electric motors, or steam, or by small hand machines run by a few battery cells. This form of treatment gives very appreciable results in office practice. Vibratory massage stimulates the nerves by causing them to vibrate more or

Soles occidere et redire possunt,
Nobis, cum semel occidit brevis lux,
Nox est perpetus una dormienda.—Catullus.

I believe 3000 U. S. soldiers lost their lives because of adulterated, impure, poisoned meat.—Gen. Nelson A. Miles, *Lancet-Clinic.*

less forcibly. With light vibration the blood supply of a part is increased. With deep vibration and pressure a painful neuralgia may be stopped. The vibration stimulates secretion and excretion; it softens and relieves muscular spasm and congestion, empties lymphathics, and lessens venous stasis. Used between the spinal vertebrae, it controls the spinal nerve centers and does more good than electricity or rest cure.

INTRACRANIAL HEMORRHAGES IN THE NEWLY-BORN.

Years ago Osler in a little book called "Cerebral Palsies of Childhood" directed attention to the fact that many cases of "infantile paralysis" depend upon intracranial hemorrhage. Dr. Harry Cushing, one of Osler's later associates at Johns Hopkins Hospital, in a recent article makes a strong plea in favor of early operations on infants suffering from injuries received during labor. The operation will often result in saving life and may even prevent the disastrous after-effects of this condition as manifest in spastic paraplegia, hemiplegia and mental defects. Four cases are reported, with two recoveries and two deaths.

DISPLACED KIDNEY.

Nervous symptoms and pelvic symptoms dependent upon wandering kidney are far more frequent than generally believed. If more kidneys had been anchored and fewer ovaries removed, gynecologists would not have been so severely criticized by neurologists as they have been; and many a suffering invalid would have been cured instead of merely improved (by the rest in bed). Whenever a kidney is found completely below the ribs it is making serious traction on the nerves and vessels, it is causing trouble and should be replaced and sutured. It is almost phenomenal how quickly and permanently many chronic invalids may be restored to perfect health by fixation of a loose kidney which had escaped recognition for perhaps years. Why? Not because the doctor did not know about loosened kidney, but because he had been "too busy" to make careful examination; or had been too deeply interested in "local treatments" of a wholly innocent uterus through a speculum (for dollars?); or too much of a doser to believe in surgical measures. Some become so wholly absorbed in the administration of drugs as to lose sight of the necessity for operative treatment of certain conditions. This is deplorable, but true. Others, knowing, fear to advise operation as the patients may loose faith in them if they admit there is anything they cannot cure! This is cowardly, but also true.

COMBINED EXTRAUTERINE AND INTRAUTERINE PREGNANCY.

A case of conjoined ectopic gestation with normal pregnancy is reported in *Medical Record* by H. T. Miller. The patient was a woman of forty, who had had two children, now aged six and fourteen years respectively. In the fall of 1904 symptoms developed which indicated an extrauterine pregnancy, and when she came under the author's care in May, 1905, this diagnosis was made. On opening the abdomen a cyst-like tumor having a pedicle containing the right Fallopian tube was removed. The cavity of the sac was distended with dark-colored blood and contained the remnants of a placenta and degenerated fetus. The size of the uterus gave rise to the suspicion of an intrauterine pregnancy, which was verified on the second day after the operation by the spontaneous expulsion of a perfectly formed four months' fetus.

Pneumonia: A peculiarity of the temperature is a sensation to the touch resembling the feel of hot sand.—Millican, *J. Mo. S. M. A.*

Cabot is the great Boston pessimist, but as he writes on the Renaissance of Therapeutics we have hopes of his recovery.

DEPARTMENT OF
DERMATOLOGY, VENEREAL AND SEXUAL DISEASES
WITH A REVIEW OF THE LITERATURE OF THE WORLD
In charge of Dr. WILLIAM J. ROBINSON.
Address all communications designed exclusively for this department to Dr. William J. Robinson, 12 Mt. Morris Park, West, New York City.

HOW TO STUDY DERMATOLOGY AND VENEREAL DISEASES IN EUROPE.

BY WILLIAM J. ROBINSON, M. D.

THE question how to utilize one's time to best advantage, what clinics to attend, etc., has been put to the writer many times by physicians going abroad to study dermatology and genito-urinary diseases. A brief sketch, will, we trust, not be devoid of interest to the readers of CLINICAL MEDICINE. The world's medical centers change. In the beginning of the nineteenth century the capital of the medical world was located in Paris; it then changed to Vienna (and the change we may remark *en passant* was not for the best, as it was in Vienna that the enervating, discouraging medical do-nothingism was born) and now, as for the two, three decades past, the honor unquestionably belongs to the city of Berlin.

I have my doubts about Berlin being the best place for medical studies; the distractions are too great and the professors and other teachers who give instruction to foreigners have, with a few exceptions, become too thoroughly commercialized; but as everybody who goes to study abroad thinks he cannot get along without Berlin, and as Berlin is generally the first stopping place, I will commence this article with an account of the dermatologic and venereal clinics in the capital of the Hohenzollerns.

The section of the city in which most of the clinics are located, and which is known as the *Lateinische Viertel* (the Latin quarter) in imitation of the inimitable and famous *Quartier Latin* of Paris, is not a very pleasant place to live in. The houses are not any too sanitary; baths are an unknown luxury; gas in the rooms likewise. (If you want to study evenings, you must use a lamp or a candle. The German student is however, not very much annoyed by this as he is seldom home evenings. He spends them as a rule in the Kneipe or beer-restaurant.) Nevertheless, that's where you will most probably settle, as you are thus within two or three minutes' walk of most of the skin and genitourinary clinics; you avoid riding and if you have a free hour, you can spend it profitably in your room.

The first skin clinic you will attend, is that of Joseph at 26 Ziegelstrasse. The rooms of Joseph's policlinic (dispensary) are small, dark, ill-smelling and filthy. Joseph himself is gross, vulgar and ungentlemanly. And nevertheless, if you are in Berlin, you must not fail to take at least one course (lasting one month) with Joseph. He is physician to numerous "lodges" and the material is very abundant. You generally see 40 to 50 cases in a morning, while on a Sunday morning you may see as many

as two hundred. The clientele is of the poorest class and sure enough there are very many cases of pediculosis, scabies, trade eczemas, but you also see very many interesting and rare cases. The clinic starts at 9:30 and lasts until 11 a. m. (The cost of each monthly course is 40 marks—10 dollars.)

As soon as Joseph's clinic is over you walk over—only two minutes' walk—to Prof. Lassar's place, 31 Karlstrasse. The contrast between Joseph's and Lassar's clinic is a very pleasant one. The auditorium is light, commodious, clean, and the seats are comfortable. Not many cases are shown during each hour (from 4 to 10), but each case is discussed thoroughly. Joseph uses and discusses only medicinal treatment, while in Lassar's you can see demonstrated the very latest therapeutic measures—the Finsen light, x-ray, radium, hot air, etc. A useful and interesting feature of Lassar's lectures is the beautiful true-to-life stereoptican demonstrations and the numerous excellent moulages, prepared by that rare artist, Kasten. Lassar's lecture lasts until 12, and two minutes' walk brings you to the Charité, where Prof. Lesser holds his clinic. This is the regular University clinic given to the medical students, but it is worth while attending it, as you can see there some very good cases and there is no charge for is. Having spent from 9 to 1 in examining various dermatologic and venereal cases, you feel pretty tired, and are ready for a breath of fresh air and lunch, or rather dinner, as the Berliners call their midday meal. At 2 you are ready to resume and you devote your afternoon to histological and microscopic studies. Joseph gives a course in the histology of the skin, but it is worthless. Heller gives a good course. If you want to attend clinics devoted exclusively to gonorrhea and diseases of the urinary organs, you can attend the clinics of Lewin, Frank, Wossidlo, Lohnstein, or Casper. In those clinics you also get courses in endoscopy and cystoscopy. The price of the courses, which lasts one month, ranges from 40 to 100 marks. (Ten to twenty-five dollars.)

If you are an earnest student or have an introduction you will not have much difficulty in getting into one of the clinics as an assistant (Volontar-Arzt), and this is of course much preferable to merely attending lectures and demonstration; for as an assistant you do the work and are initiated into all the details of diagnosis and treatment.

If you do not know the German language and are unfamiliar with European ways, it will be well for you to pay a visit to the Anglo-American Medical Association of Berlin* which meets every Saturday night at the Heidelberger restaurant in the Central Hotel, Friedrichstrasse. Everybody will direct you there. There you will meet a number of fellow Americans who have been in Berlin long enough to know the ropes, who will give you useful information.

Having gotten through with Berlin, you hie yourself to Vienna. If you intend to specialize in dermatology, you cannot afford to miss Vienna. En route there you pass the unique and ancient capital of Bohemia, Prague, and you may stop there for a day or two. Prague has a good man, Pick, the editor of the famous *Archiv f. Dermatologie und Syphilis*. The clinical material is, however, scanty and in one morning you can see all the interesting cases they have at the hospital.

*This Association is an outgrowth of the Berlin Anglo-American Medical Society of which the present writer had the honor to be president in 1895. He was the second president, having succeeded Dr. F. C. Valentine, who was the Society's first president. Dr. H. Wossidlo, the well known specialist on genito-urinary diseases, who speaks English perfectly, was at that time secretary.

We only object to therapic pessimism when it leads one to sit down and do nothing for the relief of the suffering.

The mass of topics embraced in the 14 volumes of Solis Cohen's work should be termed not physiologic but Indirect Therapy.

Vienna is an exceedingly dull city—the dullest of the large capitals. Beautiful? Yes, but it is the decaying beauty of a coquette. The capital is typical of the whole Austrian empire, which will go to pieces as soon as Franz Joseph has joined his Hapsburg ancestors. But this is neither here nor there. You go to Vienna to see skin diseases and not to grieve or rejoice over the slow death of an old monarchy. And skin diseases you can see here a plenty. Sure enough, the University Skin Clinic is not the same that it was under the father of modern dermatology, Hebra, or under his son-in-law and successor Kaposi; then is was unapproachable; but still you can see there more and a greater variety of skin cases in a morning than in any other place, except perhaps, the Hopital St. Louis in Paris.

The head of the Clinic, the successor of Hebra and Kaposi is Prof. Riehl, a small man (using the word small both in the physical and abstract sense) who always smokes cigarettes and rather dislikes Americans. But during the vacation months he is very seldom there, and the clinic as well as the hospital is under the charge of his first assistant Von Zumbush (whose father, the sculptor, has contributed so many beautiful monuments to Vienna). His work is more satisfactory.

More important than the clinic are the daily visits to the hospital, where you can see some very rare and unique cases; in no other place in the world can you see so many cases and varieties of pemphigus, for instance. You will also see a number of cases in the permanent bath; some patients pass four, six months, and longer in the water; sleep there, have their meals, etc. In cases of extensive bedsores, severe burns, pemphigus, etc., the permanent bath does good service.

From Riehl's Clinic you can go over directly to Finger's and to Lang's. Finger's clinic is chiefly gonorrhea and Lang's syphilis. And these clinics are situated in one building—in the General Hospital, which is by far the largest hospital in the world. This is one of the advantages of studying medicine in Vienna—practically all clinics are held within the enclosure of the General Hospital; no time to lose in going from one clinic to another. The University Roentgen Institute is also in the General Hospital and is conducted by two bright young fellows, Dr. Holzknecht and Dr. Robinsohn. They'll be glad to show you the latest improvements in radiography and radiotherapy, they themselves having done considerable original work in those lines. The official head of the Roentgen Institute is Prof. Ed. Lang and he is also the head of the Lupus Institute, which you must visit without fail, unless you have a sensitive stomach. You will see here the most horrible deformities; you will see here faces without noses; without lips, without eyes, without cheeks, without ears, faces that have not a vestige of the human face-features left—and all clamoring for relief or hoping for a cure.

And here you will pardon me for a little digression. In contemplating those faces, the mere sight of which upsets your insides and spoils your appetite for days to come, I often ask myself the question: What is it that keeps these people alive? What mysterious bond is there that keeps them attached to life? Their nights and days are one round of suffering. They are a burden to themselves and to others. Everybody involuntarily loathes them and shudders at their sight—and *they know it.* And nevertheless they insist on living. They think less of committing suicide than does the happiest and healthiest mortal. I know of

Just be patient till Cabot catches on, said a number of our Boston friends, met during the great A. M. A. meeting. Cabot rules that city.

Philip Marvel traces acute lympatic leukemias to precedent streptococcal attacks of tonsillitis. A good point to notice.

cases where poison was left (deliberately?) within easy reach of those patients, but nothing was apparently further from their mind than to take advantage of it. So I ask again, what is it that binds those people, who have nothing to live for and are involuntarily loathed by everybody, to life? Perhaps my readers can solve the riddle, for such it has always been to me.

And with this digression we will proceed. There are a number of excellent clinics in Europe. Neisser's in Breslau is one of the best. Jadassohn's in Berne is very good for the theoretical study of dermatology. Jadassohn is one of the best authorities on the histology and pathology of the skin. He is a charming gentleman, but the clinical material is necessarily limited. Unna's place in Hamburg cannot be recommended. He has a very large material in his "Dermatologicum," but they are private patients and the student does not get a chance to see them. The dispensary material, moreover, is rather scanty.

It is, however, not necessary to visit all German clinics and after Berlin and Vienna one may skip the rest and run over to Paris. The material there is not only exceedingly abundant, but the treatment differs in many details from the German-Austrian ways, and it is well to be acquainted with all schools. There are many clinics in Paris devoted to skin and venereal diseases, but for all practical purposes it will be quite sufficient for you to limit your attendance to the Hopital St. Louis (at the end of the Rue Bichat). In a month you will see there enough cases to last you a life time. You need no introductions of any kind. Just open the door, walk in and take a seat near the professor or assistant who will greet you pleasantly and will take care to explain you everything and answer all your questions.

Right here I want to ask permission to make another digression. I want to touch on the difference between medical studies in Germany and France, which also shows the difference between monarchy and republicanism. In Germany or Austria when you come to a clinic you are expected to introduce yourself, to give your card, etc. The men are, with certain exceptions of course, not any too polite. The American physician is looked upon as a good thing, and unless the instructor or professor can get some money out of him, he is treated with but scanty courtesy. (This refers to the average young physician, and not to a well-known man, the man with a name, of course.) The courses to foreign physicians have become in most instances thoroughly commercialized and some of them, conducted just for the money there is in them, are worthless to the student. The patients in the German clinics are handled with very little consideration, often with heartless brutality. Many a time I felt forced to leave a clinic before the end, because I could not stand what was going on. There is too much unjustifiable experimentation on the patients going on. This may not please some of my friends, but it is the unvarnished truth. The cursed spirit of militarism has penetrated everything, has permeated every class of society. The professor yells at the privat-docent, the docent growls at the assistant, the assistant swears at the nurse and the nurse or orderly in revenge maltreats the patient (this is an actual scene witnessed by me at the Charité in Berlin), and the patient humbly swallows all insults and injuries for he knows that the slighest attempt at protest means an unceremonious kicking out from the clinic or hospital. If a German professor makes a diagnosis, it is a risky and unpleasant thing to disagree with him. If you have a

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Cabot says we are now witnessing a limitation of the sphere both of surgical and of drug therapeutics.

The "New Thought" seems to consist mainly in efforts to perpetuate old errors and long exploded hypotheses—antivaccination!

different opinion, you keep it to yourself. Criticism is not encouraged.

All this is different in republican France. You enter any clinic, you take a seat, you are asked no questions and you are treated with the utmost courtesy. The doctors do not resent it, if you happen to disagree with their diagnosis, if you make your own suggestions as to treatment, etc. They enter good naturedly into discussion with you because they consider you their equal. The patients have self-dignity and are treated politely. In short, the spirit of democracy is very distinctly in evidence.

The clinic at the Hopital St. Louis lasts from 9 to 12 in the forenoon, when there is a recess, and is resumed in the afternoon. But the morning clinic will suffice you. The afternoon you can spend very profitably in the Musée Baretta which is situated in the same building and which contains the largest and best collection of moulages (wax models) illustrating skin and syphilitic diseases. You can spend weeks and months studying the moulages.

Mention of the dermatologic clinic of the Hopital St. Louis would be incomplete without a reference to Gaston Gauthier. Gaston, as he is familiarly called by everybody, is the man who takes care of the clinic, keeps it in order, sees that the patients do not crowd too much, etc. He has no medical education, but nevertheless he is one of the most skilful diagnosticians in skin diseases. He has been in the clinic twelve years and his eye is so sharp, his judgment so acute, that doubtful cases are often referred to Gaston for final decision. I have seen cases where the line of demarcation was exceedingly fine, exceedingly indistinct. Gaston made the diagnosis and the course of the trouble showed that Gaston was right. The practice of calling in Gaston's aid is not by any means rare; the heads of the clinic have occasion to do it almost every morning. Don't fail to make Gaston's acquaintance if you visit the dermatologic clinic at the Hopital St. Louis. He will give you considerable assistance. Tell him I said so.

After you have seen all there is to be seen in Paris in your line, you may run over to London for a short time. But that city offers little or nothing of value in the line of clinical demonstration. The material is too scattered and the instruction is neither centralized nor systemized.

After you have spent as much time as you can afford in the various clinics in Europe, after you have seen thousands and thousands of common and ordinary, curious and rare skin affections, after you have washed and cystoscoped numerous bladders, catheterized urethers, massaged prostates and dilated strictures without number, etc., etc., you are anxious and eager to get home and apply the acquired knowledge and experience in your own practice. And if you are made of the right stuff, if you really learned something and did not go merely for bluff, you will make a success and you will not regret that you spent some of your "Wanderjahre" in effete Europe.

New York City.

THE DANGER OF CARBOLIC ACID LOTIONS.

The danger of using solutions of carbolic acid as a dressing has been pointed out many times. But to many physicians and particularly to druggists and the laity, carbolic acid is still the antiseptic par excellence, in spite of the fact that cases of gangrene from its use are quite common. The following case will prove of interest and serve perhaps as a warning.

N. B., a boy of seventeen, was brought in by his father for treatment. The disease was

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The most marked symptom of impending diabetic coma is the peculiar air-hunger described by Kussmaul, not stertorous.—Morgan, *Med. Bulletin.*

Ipecac is notoriously uncertain in action, probably because of variation in its percentage of emetine.—Butler.

supposed to be one of chancre. The penis was swollen and edematous and at the sulcus there was a large gangrenous patch. A superficial examination gave the impression of a phagadenic ulcer. A week previous the boy had noticed a number of little vesicles and pimples behind the corona glandis and the druggist advised the constant application of a 3 per cent solution of carbolic acid. This was done faithfully with the result that after three or four days the condition began to get steadily worse, ending in a nasty gangrenous patch. The solution of phenol was applied on cotton, which was held in place by a narrow roller bandage. It is possible that the bandage was applied too tightly, thus impeding the circulation and aggravating the condition.

The history of the case, the results of the treatment and the subsequent events showed that the patient had not a trace of either chancre or chancroid. It was simply a case of herpes progenitalis. The patient's condition improved in about a week and in another week he was quite well, with the exception of a small scar, which is rather sensitive and which will probably always remain a *locus resistentiae minoris*. About three weeks later he developed another crop of typical herpes vesicles, thus corroborating the diagnosis absolutely. (They healed quickly under applications of powdered resorcin.)

Did the father do anything to the druggist who so maltreated his boy that he so nearly nearly lost his membrum virile? No, for the druggist was the boy's father.

A VERY SENSITIVE TEST FOR BILE PIGMENT.

Dr. Krokiewicz (*Muench. Med. Woch.* No. 11, 1906) recommends the following test as exceedingly sensitive and reliable. The necessary reagents are: (a) A one per cent aqueous solution of sulphanilic acid; (b) a one per cent solution of sodium nitrite; (c) pure concentrated hydrochloric acid. Fifteen drops each of reagent "a" and "b" are put into a test-tube and well shaken. Then a part of this mixture is thrown away so that only about eight drops remain in the test-tube. To this an equal volume, that is, eight drops or 1-2 Cc. of the liquid to be examined, is added. If bile pigment is present, the mixture assumes a ruby red color, which on the addition of one to two drops of hydrochloric acid and dilution with distilled water changes to amethyst violet.

ARE INJECTIONS IN GONORRHEA INJURIOUS?

Being an honest chronicler, we consider it our duty to chronicle in these pages everything of interest in our specialty, whether the author's views agree with ours or not. We referred in this department to the views of some genitourinary surgeons who do not believe in the internal treatment of gonorrhea. Their sole reliance is upon injections. We have now come across the other extreme. A German colleague (Dr. Canon, *Deut. Med. Wochen. No.* 22) decries the use of injections absolutely. He says the flushing of the urethra is performed by the urine better than it can be done by injections and he is strongly in favor of diuretics and other remedies which affect the quality and quanity of the urine. The harm done by injections is apt to be much greater than any good they can accomplish. They increase the inflammation, erode the mucous membrane of the urethral canal and introduce pyogenic organisms from without, which, by their multiplication, furnish a favorable soil for the development of the gonococci. With-

No individual elements stands out more clearly toward making a successful doctor than being thorough.—Bromberg, *South. Pract.*

Is it possible that wearing an abdominal bandage favors the absorption of toxic matters from the bowel into the blood?

out a favorable soil the gonococci perish rapidly. Unquestionably there is truth in the author's statement. Improper injections are liable to do great and even permanent damage. Only this morning we have seen a urethra rendered so painful and inflamed so acutely by a strong injection of silver nitrate—utterly unindicated—that malpractice (not through wickedness, but through ignorance) is the only word that can be applied to the procedure. But this is true of every kind of medication. The improper drug, or the proper drug improperly administered, will do damage. That, assuredly, does not speak against the use of drugs.

No, the truth in this, as in most other things, is in the middle, and the best results in the treatment of gonorrhea will be obtained by him who judiciously combines internal medication with local measures.

A CASE OF ESSENTIAL ALBUMINURIA.

Dr. Neukirch reports a case of essential albuminuria in a child, whose urine he had opportunities to analyze during a period of five years. When two years old, the child had a mild diphtheria and on the fifth day of the disease albumin, for the first time, was discovered in the child's morning urine. The urine passed during the day was either entirely free from albumin or contained minute quantities. This condition of the urine remained unchanged for three weeks. When the patient got well, her morning urine was always free from albumin, while the day urine always contained albumin (1-4 to 1-2 per cent). During the following five years, the urine preserved the same characteristics, the patient's general health, however, not being in any way affected. Under strict rest in bed the albumin disappeared, but reappeared again when the patient got up. Gradually, however, the albuminuria disappeared entirely. Essential albuminuria is a disease *sui generis*, depending upon anomalous innervation of the kidneys.

GUAIACOL IN THE TREATMENT OF RENAL TUBERCULOSIS.

Dr. Max Schuller recommends the internal administration of guaiacol in the treatment of tuberculosis, particularly (1) in the initial stages, (2) in cases where one kidney has been extirpated for the protection of the remaining one, and in partial operations performed for the purpose of protecting the remaining part. The author gives 12 to 20 drops daily, dissolved in 4 to 8 ounces of water and divided in five to six doses. The author reports two cases and while they offer no strict proof of the efficiency of the remedy in this disease, still they show that guaiacol thus administered may be borne for months without any injury. In cases where operation is for any reason contraindicated a trial with guaiacol may be justified. (*Centr. Harn.-und. Sex. Org.* xvii, 5).

A CASE OF RENAL CALCULUS IN A CHILD.

Dr. D. B. Mandhle (*Lancet*) reports the following interesting case. The patient, a boy, aged three and a half years, was admitted to the hospital in a cyanosed and delirious condition, and died the next evening. He was sent in as a case of measles. On admission he was cyanosed and almost pulseless and was found to be suffering from the symptoms of bronchopneumonia. In fact, he had some retraction of the thorax, was croupy, and the question of tracheotomy was considered.

For acne, Landers flushes and asepticizes the bowels and then saturates with pure calcium sulphide.—*Medical Summary.*

Bad breath is nearly always a sign of fecal retention and sometimes the first and only warning of its existence.

The symptoms all pointed to an acute attack of measles, with bronchopneumonia as its special complication and a "toxic" heart. The child died suddenly from cardiac failure after having had all the usual treatment.

At the necropsy the lungs were found to present patches of pneumonic consolidation scattered about on either side. The right side of the heart was slightly enlarged with a definite tendency to fatty degeneration. The spleen was normal. The left kidney was very congested, but otherwise normal, while the right kidney was full of renal calculi, both in the pelvis and calyces, one, the largest, being in the centre of the pelvis.

TREATMENT OF SYPHILIS OF THE OROPHARYNX.

Dr. E. E. Gibbons, (*Amer. Jour. Dermat.*, August) considers the pathology of the syphilitic lesions affecting the oropharynx and thus outlines the treatment:

Cleansing and antiseptic washes should be freely used several times a day. Unless the accumulated secretion and blood crusts are gotten rid of, one cannot carry out with any degree of efficiency topical applications. There is no cleansing agent so efficient as hydrogen peroxide. It should be applied to the ulcerating areas in full strength, and followed by an alkaline spray. The following answers the latter purpose well: Bicarbonate, biborate of sodium, carbolic acid, each dr. 1, to two pints of water.

All ulcerating surfaces should be cauterized with the mitigated nitrate of silver stick, and, after the separation of the slough, mopped freely with a solution of iodine after cleansing. The preparation having the greatest penetrating power is, of course, preferred. Iodine petrogen in 5 per cent solution answers nicely. Gummatous infiltrations, whether localized or diffused, undergo a more speedy resolution if treated with applications of iodine. The constitutional treatment consists in getting the system saturated with mercury as soon as possible, and in addition, the use of potassium iodide in the tertiary stage. It must always be borne in mind, however, that mercury is the drug that cures syphilis, and that the iodides aid only in absorption of exudates. The iodides should therefore never be employed alone in treating the tertiary stage of the disease. Opinion is divided as to the best way to administer mercury. Inunctions of blue ointment rapidly get the patient under the influence of the drug without disordering the stomach as does the administration of the drug *per os*. Whenever one desires to get the patient under the full effect of mercury, iodide of potassium should not be given, as the latter hastens the excretion of the mercury. Only after the gums are "touched" by the mercury, or there are other evidences of mercurialism, should we combine its use with potassium iodide.

INJURIES OF THE EYE.

In a good article on this subject (*Ft. Wayne Medical Journal-Magazine*, January, 1906) Dr. A. E. Bulson remarks: The presence of a foreign body in the eye is always of serious import, for in a very large percentage of cases, no matter how treated, the eye is lost and has to be removed to prevent involvement of the other eye by sympathy. In a very small percentage of cases a foreign body in the eye may become encysted and thus cease to be a source of irritation, but such instances are rare and no physician is warranted in expecting such an outcome.

No matter how freely the bowels have been opened it is not enough if bad breath persists, for feces is still retained.

It would surprise some if they knew how often anal pruritus is caused by toxic retained fecal collections.

GLEANINGS FROM FOREIGN FIELDS

Translated by E. M. Epstein, M. D.

AUTOINTOXICATION.

THE following excerpt from an article by Kahane in the forthcoming "Enzyklopædie der Practischen Medizin," Wien, 1905, published by Alfred Hoedler, No. 2, is likely to give the latest accepted views upon this always timely and important subject.

The essential conception of autointoxication, meaning "self-poisoning," is the injury done by toxic products which arise in the organism itself in its life processes, especially those of metabolism.

Self-poisons differ, therefore, from the chemical poisons from corrupted and toxic articles of food, and differ also from the toxic products of pathogenic bacteria which invade the organism from without. The last difference is, however, not possible to be made strictly, for the bacterial poisons also are elaborated only within the organism. The self-poisons are distinguished according to their place of production in the body.

1. Enterogenous self-poisons are products arising in consequence of abnormal fermentations, decompositions and putrefactions in the digestive canal.

2. Endogenous, or histogenous self-poisons, which are formed in the tissues and juices of the body.

Poisons are formed even in the normal processes of life, some of whose nature are known, as, e. g., carbonic acid in respiration, sulphureted hydrogen in the intestine, and others again are unknown, and all of them either as intermediary or final products of metabolism may be carriers of toxic effects. The disintoxication of the organism is done partly by the excretory organs, of which the kidneys, lungs, intestines and skin are of the first importance. In this way are excreted the final products which are formed in the course of the respiratory and nutrition functions, and the toxic intermediary products of metabolism are made harmless normally by oxidation. In recent times attention was directed to the disintoxication of these intermediary products of metabolism by means of certain special organs. These are the glands, of which the liver is the chief organ, and next to it as such, are to be considered the pancreas, thyroid and adrenals. As long then as these organs and arrangements functionate normally, so long the organism remains master of the toxic stuffs that are being formed, and disturbances of those functions lead to autointoxication. But it must be emphasized, that for autointoxication to take place it is not enough alone that toxic stuffs be increased, but these must find an absorption in the organism, and the arrangement for disintoxication must also refuse to operate. We are, therefore, able to distinguish various intoxications according to their different genuses, which are:

1. Retention autointoxication, owing to the inaction of the excretory organs. In this category belong the phenomena which occur when the excretory function of the kidneys becomes inactive (uremia); also the phenomena in extensive burns of the skin, or other extensive affections of it; also the symptoms occurring in disturbances of gas exchange in the lungs; and lastly the disease phenomena in sluggish or complete cessation of intestinal function (ileus). We

can also include here the intoxication from biliary retention.

2. Autointoxication in the intermediary course of the metabolism, conditioned partly on a retarded oxidation, which is frequently signalized by an abnormal accumulation of acids in the tissues. Here belong the *coma diabeticum*, and also the *coma carcinomatosum*.

3. Autointoxication from the inaction of disintoxicating organs. Here belong the phenomena of cholemia, pancreatic diabetes, myxedema, Addison's disease (?), etc.

And it is not only the above diseases that are attributed to autointoxication, many other diseases and complexes of disease symptoms occurring during certain diseases are also attributed to autointoxication, and the limits are extended decidedly beyond propriety.

The experimental foundations of the doctrine of autointoxication are extremely defective and contradictory. This is true also of the properly considered toxic stuffs of the intermediary metabolism specially, and these stuffs are almost wholly unknown. The numerous investigations in the toxicity of the urine, blood-serum, and tissue extracts, both in health and in disease, gave absolutely no reliable supporting points, and the expectation that urine, blood and tissue extracts in autointoxication conditions would be more poisonous than in normal conditions was not confirmed. What is really meant by the word poison is very vague, and experiments on brutes prove very little. And yet clinical observation show decidedly in favor of autointoxication. Without it we cannot account for uremia, eclampsia, coma carcinomatosum, coma diabeticum, and the tetany which comes in consequence of, or concomitantly with an increase of putrefaction processes in the gastrointestinal tract. And although the real poison stuffs are unknown to us, still are there certain indicators, especially in the urine, which point to an abnormal accumulation of poisonous stuffs in the organism. Thus we have phenol, indol and skatol as indicators of intestinal putrefaction, and acetone, acetic acid, and oxybuteric acid (demonstrated in coma diabeticum) as indicators of acid intoxications. Let it be remembered that the stuffs here mentioned are not poisons themselves, but only indicators of poisons.

The clinical symptoms observed in autointoxication to be mentioned are: Disturbances of consciousness, which can reach down to deep coma, as in coma of diabetes, carcinoma, and uremia; convulsions as in uremia, eclampsia and tetany; reduction of cardiac activity and in certain cases pulse retardation, as in cholemia. Bodily temperature shows various states, often a reduction. In enterogenous autointoxication various cutaneous exanthemata are mentioned by authors, and lately the dermatosis called scleroderma was ranged in this category.

The prognosis of autointoxication is, generally speaking, unfavorable, and in severe intermediary and retention intoxication, as in coma diabeticum, in uremia, cholemia, etc., it is directly very unfavorable. A more favorable prognosis may be made in enterogenous autointoxication of a lighter degree.

The treatment of autointoxication must shape itself in accordance with the form of the genesis and the nature of the case presented. Where an excess of decomposition processes is assumed in the gastrointestinal tract, there a quick evacuation of these is the most important. Recommended are: Stomach lavage, intestinal irrigation, administration of gastrointestinal antisepsis, such as hydrochloric acid, menthol in capsules containing 0.1 to 0.2 (gr. 1 1-2 to 3) three to six daily, resorcin in solution 2-200, a teaspoon-

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Bad breath, anal itching, little maturating pimples—do you need any more evidence of retained fecal collections?

Some toxin formed in retained feces attacks epithelium, causing scaling skin, dandruff, brittleness of the nails.

ful three times a day. [The author of course fails to mention the sulphocarbolates, which is like the play of Hamlet with Hamlet left out!—Ed.] The diet must be nonstimulant.

When excretory functions are low they must be stimulated, the skin with diaphoretics, the kidneys with diuretics, the bowels with cathartics. In acid intoxications are recommended alkalies, sodium bicarbonate up to 100 grams (25 drams) in twenty-four hours, and energetic cathartics. In severe intermediary autointoxication venesection, and eventually intravenous injection of physiologic (0.6 per cent) salt solution.

ACUTE, DIFFUSE GENERAL MYELITIS.

The onset of this affection is rapid and it is almost always febrile. The causes most known are colds, excessive fatigue and bladder troubles. Besides, many acute diseases may become complicated with myelitis. The process in the spinal cord is a painful one; there is pain around the waist and formication of the lower extremities.

Paraplegia may become complete in thirty-six to forty-eight hours. There is also at the same time anesthesia, which begins at the soles of the feet and ascends gradually. There is also a perversion of sensibility; cold feels warm and warm feels cold. At first the reflexes are frequently exaggerated. The progress of the disease is ascending, and death may ensue by syncope and asphyxia. There is rapid loss of electromuscular contractility. The life of the patient is not in great danger, but radical recovery is rare.

Frequently there can be noticed atrophy of the anterior of the deltoid muscle, while the middle and posterior muscular bundles recover gradually their normal vitality.

Electricity is a great help in the prognosis. When electro-muscular contractility has disappeared in a group of muscles and atrophy has already begun prognosis is bad. If on the contrary the electric current manifests some contractility, even ever so feeble, we can have hope of a recovery.

Treatment.—The dosimetric triad is always rational. Arsenate of strychnine in high doses, of eight to ten granules daily, digitalin, aconitine, veratrine, caffeine, acid phosphoric, santonin in infantile cases. Saline laxative every morning before breakfast. The variant treatment will consist in antiphlogistics; revulsants to the spinal column; leeches, in variable number, according to age. Electric excitation of the muscles; the current should be given with long intermissions, and the muscles should be treated separately. Too strong current with very short interruption does more harm than good. The continued current is of less efficacy than the interrupted one managed by an expert hand.

When the muscles are destroyed we must have recourse to the present advanced orthopedics.—Dr. Galopin in "Medicine Dosimetrique," Tom. II, p. 805–6.

TYPHOID INTESTINAL PERFORATION.

The usual causes of the symptoms of this complication given in treatises have reference to the peritoneum alone. Dr. Meakins writes in the *Montreal Medical Journal*, Oct. 1905, p. 471, that he made a study of this point in thirty-two cases of perforation in a totality of 1,230 typhoid cases, twenty of whom were operated with five recoveries after the operation.

The appearance of perforation symptoms is usually sudden. Sudden pain occurred in eighty-four of the cases. The pain is more frequently diffuse, but at times it irradiates from different spots. Sensitiveness to pressure is constant, which is a most valuable and important early symptom. Rigid-

It would surprise most doctors to know how difficult it really is to completely remove fecal collections from the bowels.

Small doses of anticonstipation granules scattered through the day restore sensation and contractility to paretic colons.

ity of the abdominal wall was observed in twenty-four cases, and appears on the average twelve hours after the first symptoms.

The signs that follow are of secondary importance; nausea and vomiting were in 46.8 per cent of the cases. Perspiration is a later sign. Hiccough, too, occurred in three cases. The pulse and respiration give no early signs. In ten cases there was an acceleration of respiration at the end of three hours, and in twenty cases at the end of five hours. The appearance of the face is an untrustworthy sign, but it is not so with the arrest of "abdominal" respiration.

Rectal (digital) touch may give sometimes most valuable information by determining the point of maximum pain on the right side, more rarely on the left side. The author cites very conclusive instances in this respect. The number of leucocytes is of no value as an early symptom.

To resume: It is dangerous to follow the symptoms of perforation described in the text-books with reference to the question of operating. The exposition given above shows the relative importance that is to be attached to the different signs. Pain, even slight, is to be placed in the first line; then come sensitiveness and contracture. The other signs indicate the more or less advanced state of the perforation. Attentive and frequent examination is necessary. The author thinks it preferable to make an explorative laparotomy in case of doubt rather than operate too late.—A. Housquains in *Gazette des Hopitaux*, 1906, p. 247.

HEMOGLOBINURIA AND QUININE.

The globular resistance observed in a paludic patient each time he was affected with hemoglobinuria when he took quinine convinced Vincent and Dopter of the following particulars:

The globular resistance of the patient unaffected by quinine is more feeble than in health. One hour after taking quinine the resistance was still greater, then it became stronger at the close of hemoglobinuric attack, and nine days after that resistance became normal.

In the same patient the globular resistance under the influence of quinine showed itself constantly below normal. This fact proves well that the administration of quinine is a capital cause of hemoglobinuria in certain paludic patients.—*Gazette des Hopitaux*, 1906, p. 246.

FORMALDEHYDE AS AN INTERNAL DISINFECTANT.

Free formaldehyde in the blood, was demonstrated by Rosenberg in feeding a dog with two per cent formaldehyde in milk sugar, along with a little chopped meat, without injury to the animal, the dose being twenty grams of that sugar. It seems, therefore, possible, to use formaldehyde for internal disinfecting purposes. This suggests therapeutic possibilities of great value.—(*Ph. C. H.*, 1906, p. 388.)

CORNUTINUM CONCENTRATUM.

"Schoefer" is, according to the *Pharm. Ztg.*, No. 20, 1906, an almost pure alkaloid of ergot in solution, containing specific ergotic acid, little extractives, free from all the acrid matters of ergot, of soft resins, indifferent substances, resinous acids and excitants of fermentations. It shows a uniform content of cornutine and can be depended upon for uniform effects, which take place half an hour after taking. Dose two grams, equal to half a teaspoonful, every ten minutes till the desired effect.—*Pharmaceutische Centralhalle*, 1906, p. 258.)

The more one studies fecal retention the more it is evident that it is a prime factor in disease causation.

Constipation is a real evil and can not be treated too persistently so long as it is treated intelligently. —Barrs, *Lancet*.

MISCELLANEOUS ARTICLES

COMMON SENSE AND ALKALOIDAL METHODS WIN AGAIN.

CLINICAL MEDICINE certainly improves with each issue and anyone who fails to gather beneficial pointers from its various interesting departments must be an indifferent reader.

Some time since I reported a case of auto-infection to the "family" and I think I have another equally interesting, but differing somewhat in symptoms and treatment.

I was called at 10 p. m. to see a woman, middle-aged, married, with the following history, which by the way I obtained from her husband and herself after recovery. History of a chill. Pain in the cervical area of the spine, extending upward and involving the mastoid areas on both sides; much tenderness on pressure all over mastoid area. Nasal discharge. Face swollen and eyes nearly closed. Tongue thick, articulation difficult; deglutition painful. As I entered the room she was in bed, flat on her stomach, covered with all the bedding that could be obtained in the house, for she was cold. This was in July, and the thermometer stood at seventy at least in the room, and judging by my feelings when I got through with her it was 150° F., for I was "sopping wet."

She was six feet tall and weighed one hundred and ninety pounds. I could not touch her without eliciting a cry of pain. She was sore all over her body. She could not move herself and was too sore for me to attempt to move her. There was no one there to help me but her husband and he was so frightened that he was of no use. Well, this was a time to think quickly and "to effect" as her head was buried in the pillow and by the rattling in her nose and throat she was not getting any too good air supply. Under the circumstances what was to be done? I got my "hypo" ready and was just getting in position for its application when a groan from the clothes, accompanied by a slight motion of the hand indicated an objection which I was inclined to heed, as she might have some peculiar idiosyncracy which I did not care to take chances with, and so I squirted it out where she could see me do it and gave another "think." The only part of her which I could get at well was her spine and this I could reach for its entire length. So I thought of our old friend, mustard, and as soon as possible I used one part of mustard with two parts of flour and made a paste with boiling water. This I spread on a cloth and doubling it so as to have it between the layers, I applied a strip about two inches wide to the whole spinal area from the base of the hair to the lumbar region and then added a strip cross wise just below the shoulder blades. This I kept on until it produced a good deep red area which looked very much as though I had painted it with a brush full of red paint. I did not want to blister but did want to produce a reflex spinal reaction.

As soon as this was done I managed to get a veratrine pellet, 1-134 grain, on her tongue. She did not feel the mustard at all but the effect on her condition was wonderful, for inside of ten minutes she could breathe easier, the swelling left the face to a large extent and in half an hour she could turn

over and in an hour she was quite comfortable, though still complaining of a sore, stiff feeling in the back of her head and ears. I tried to get her to go to the hospital, as I feared mastoid involvement and possible necessity for operation, but she wouldn't consent to this so I had to treat her at home. This treatment consisted of veratrine to the limit the first day, calcium sulphide and echinacea in tablet form to effect. Application of the mustard draft for one minute each day thereafter. I did not blister but dressed the irritated area with one part turpentine, one part echinacea (specific tincture) two parts camphorated oil. Of course I kept the *primæ viæ* clean and clear. The patient was up and doing her work in just one week. Now tell me what was the matter with her?

I have learned something about a static machine and am not having so much trouble with mine now. When it "won't go" I don't open it and tinker it all out of joint but just let it alone and when the electric conditions in the atmosphere change my machine goes all right. The changes take place outside and not inside of our machines and we can sweat and swear and tinker all we want to and the machine will balk until the outside conditions change.

CHAS. E. BUCK.

Boston, Mass.

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We will leave the diagnosis of this case with our readers. What *was* the matter with this patient? At any rate it illustrates the importance of treating conditions, not a name, as we have so often preached. The doctor did this and "won out."—ED.

A BEGINNING.

Three years ago this spring I gave up my professional work in disgust. There seemed so much uncertainty and I received so little of the good that I should have from the administration of drugs that after six years in very active practice I changed to commercial lines; but (and I hope you will notice the "but") I have been a constant reader of CLINICAL MEDICINE and the more I read the more I am impressed with the fact that my results were due to using ancient pharmaceuticals or those without any efficiency, and I am almost persuaded (in fact fully persuaded) to take the bull by the horns and give him another whirl that will send him sprawling.

I have determined to locate in a town of 70,000 where so far as I am able to learn there is no physician using the active-principle remedies. The field looks good. Now what I would like you to do is to suggest the best line of literature for a beginner and the books that will be of most value to me. If there is anything in using drugs to effect I am going to find it out.

H. M.

——, Ohio.

—:o:—

Let us assure you, Doctor, that it is not the first letter of the type which we have received. One after another doctors write us, "I would that I could turn back the hands of the clock and begin practice again with my present knowledge of the alkaloids and active principles." Now, Doctor, if you can find a town of seventy thousand without an alkaloidist you have made a discovery indeed and we sincerely trust that you may within a few years have the majority of the work available there. If we can help you reap the harvest command us.

As regards literature you should have "Alkaloidal Therapeutics," the Waugh-Abbott "Alkaloidal Digest;" Waugh's "Treatment of the Sick," CLINICAL MEDICINE of course and the new work on Practice

Uremia:—Choose foods quickly digested and absorbed, not rich in extractives or easily putrescible; milk, eggwhite.—Bouchard.

Uremia:—Admit little putrescible food, like milk, forming solid residues least offering absorptive facilities.—Bouchard.

which we shall be ready to supply shortly. When you get ready let us know just what you propose to do and we will outline a list of preparations you should carry and if you desire us to do so will suggest the best method of starting out. If, however, you will read the "Primer" in the Digest you will get a pretty good idea of things.

Be assured that positive success invariably follows the exhibition of the right remedy for the condition present in small oft-repeated doses, also that a clean and clear intestinal tract and an absorptive digestive tract mean everything in the conflict with acute disease. —Ed.

TYPHOID POORLY TREATED.

Twenty-two days ago I was called to a case of typhoid. I found the patient had been in bed for two days. Temperature 104° F. I gave aconitine and applied cold pack for twenty minutes. The skin felt cool but the thermometer still read as before. I gave aconitine, one granule every half hour. I continued the sponging with cool water; fever kept as before. At the end of two hours I left, directing to give calomel, 1-6 grain every half hour until six granules had been taken to be followed by sulphocarbolates every two hours while awake.

Next morning I found the fever still higher. During the night the patient had had three stools,—thin, dark, watery, offensive. I continued the calomel followed with saline every day, using sulphocarbolates every two hours, yet for eight days the temperature ranged from 103.2° to 105.2° F.

Now the temperature averages 100, stools are thin and watery, dark and offensive, by no means normal. This case was not the "mild and transient affair" of your Digest. My faith has received an unpleasant jolt.

Kindly give me a criticism of my treatment. Do I expect too much? Wherein did I err? I may add that heart action was good throughout.

H. J. W.

——, Washington.

—:o:—

It is most unfortunate that after all we have said and done to teach the profession thoroughness, especially on this point (see my late paper, p. 876 July Clinical Medicine) that any man should so utterly fail to appreciate conditions as did good Dr. H. J. W. The alimentary canal of his patient was a reeking cesspool when he took the case; it remained so for twenty-two days, and was so with frightful toxicity added, when the letter was written. The doctor was promptly answered by private letter but for fear others may be playing at this most essential matter—the very foundation of success, I will reiterate right here, and to show you all (as many of you know by experience) the pains we take to help, I will repeat in full as written:

Your recent letter, descriptive of your treatment of a case of typhoid, is to hand and the request for criticism granted with pleasure. In enteric fever we have fever caused by a systemic infection (toxins entering the body-fluid from the horde of bacilli in the intestine). This being understood to attempt at first to reduce temperature, thus distressing an already laboring heart, is poor therapeutics. Our first aim should be to secure an empty intestine and normally active liver and kidneys. At the same time we may as well secure the skin as an ally and cause free elimination of waste *via* the pores. Hence we would recommend the exhibition of calomel, gr. 1-6, (or blue mass gr. 1-4) and podophyllin, gr. 1-6, every half hour (or hour) for six doses following the last dose with a copious saline draught.

Charcoal fixes intestinal toxins preventing their absorption; iodoform and naphthalin allow disinfection also.—Bouchard.

Tapret has thrice seen uremic accidents disappear when intestinal antisepsis had been induced.—Bouchard.

The requisite stools having been secured and pending their arrival we are giving epsom-salt sponge baths and exhibiting the sulphocarbolates (one tablet of the W-A intestinal antiseptic crushed and with water every two hours). We give a high antiseptic enema and then settle down to secure and maintain a fairly sterile intestine. The sulphocarbolates are now given in larger doses (grs. 10, four to six times daily) and, as often we give echinacea—or baptisin if the indications for that drug present) with aconitine, strychnine and digitalin until the temperature falls to 100° F. and stays there. In some cases we use instead of strychnine, veratrine (see defervescent comp.) but this formula is used only where sthenic conditions exist and the pulse is full and bounding. Look up the action of veratrine. Aconitine alone is useful in the reduction of temperature; but in profound germ diseases and in autotoxemia, we find it best to reduce temperature by first cutting off the supply of toxins, using aconitine only as one weapon, guarding its effects with cardiac tonics such as digitalin, cactin or sparteine.

To support the vital forces strychnine or brucine is used throughout in large or small doses as occasion may need, and nuclein, our most potent reconstructant, is given in full doses to increase the natural resistance to germs and phagocytic activity. If the calomel and podophyllin are repeated as they may be needed (usually every third day,) and saline draughts, antiseptic enemata and epsom salt sponges given frequently, the sulphocarbolates will take care of the bacteria in the intestine (especially as we cut off all food except clam broth, albumen water, and beef juice for the first forty-eight hours), and echinacea and nuclein taken into the system when the circulation is in order will suppress the toxins in the body fluids.

If we unduly depress the heart or disturb the circulation we must expect trouble and if we allow any part of the *primæ viæ* to remain filthy and bacteria-laden we must look for a prolonged and stubborn fever. Bile is, after all, a most effective antiseptic and if we cause the liver to act efficiently we have an ally in it. In these days, moreover, we have the active principle of bile at our disposal and bilein may well be added to our calomel and podophyllin. One more point: in many cases of typhoid there is often a malarial element, small doses of quinine arsenate, gr. 1-6, may therefore be given with good effect every two hours from ten a. m. to six p. m. Once the disease is under control (as it usually is in three days if the above measures are taken and "dose enough" given) we may give cactin the preference as a heart tonic and nutriant. Push beef-juice and similar blood foods and allow koumiss or even milk and lime-water cautiously (the writer usually has better results when milk is forbidden until quite late) substituting calcium or sodium sulphocarbolates alone for the "sulphocarbolates comp." and exhibiting the three arsenates (iron, quinine and strychnine) with nuclein together. At this point hydrastin (acting upon the intestinal mucosa) and arbutin may well be given, the latter exerting an especially useful influence upon the overworked kidneys. Finally we give the formin compound or boldine for two days (one every three hours) and then expect to have normal conditions—or nearly so as far as the urinary organs are concerned. It is well to continue tonic alteratives and intestinal antiseptics for some time after the patient is supposed to be well.

Now, Doctor, recovery depends as much upon what we do not do as what we do, and the way we do it and when we do it, has a whole lot of influence upon the results.

I have seen formidable uremic dyspnea disappear within 24 hours after administration of napthalin.—Bouchard.

The Code says physicians and their families are entitled to gratuitous service from neighboring physicians, not from all.

With a foul intestine we may have to push antipyretics to a dangerous extent and thus do more harm than good; with the wrong "intestinal antiseptic" we may set up such irritation that we offer an open gate to the bacteria present; and finally, by giving improper food or forgetting the skin or kidneys, we may reinforce the invading germs and utterly nullify our own efforts. Take our "outline of treatment" as a criticism of yours; go over it carefully and then review your action in the case described; you will soon find out the weak places as we did and next time will do the right thing at the right time and do it thoroughly, giving "the small dose at frequent intervals to effect." Success to you, Doctor, and believe us, hundreds of doctors are positively controlling typhoid fever in this way.

No two cases are ever treated just exactly alike but practically all may be treated with the same good results.—Ed.

OPENINGS IN LOUISIANA.

Not many moons ago you made mention of your annual visit to this State, and referred to its many resources, advantages, etc. In this I can agree with you.

Our State offers more "natural" advantages to the working man and to capital than any other in the Union. I came here eight years ago with less than $200, and owed $160; have all the time paid 100 cents on every dollar that I owed, and today I own 730 acres of good land, every acre of which can be cultivated, within one mile of two railroad stations, and fifteen miles from Shreveport, which is the second city in population in the state, also ten acres of residence property and a nice two-story business house in the little town in which I live; also a lot of cattle, mules and horses, and a nice bank account. I have made all this with my own efforts, by lots of hard work, economy and investing. Any other man can do well in this state, with either labor or capital.

The soil in Northwest Louisiana will grow most everything—ribbon cane for syrup, cotton, corn, tobacco, potatoes, all kinds of vegetables and the finest peaches in the world, also pears, figs, apples and plums. Melons will grow to weigh from 25 to 75 pounds, and the nicest any one ever saw. The dairy and poultry business are both profitable.

I now would like to have a German with experience to take stock and run a dairy business. There is good money in it if run properly. Our diseases are chiefly some type of malaria; they are very easily treated and no worse than in Illinois. Yellow fever, since the mosquito theory, is no longer to be dreaded; it is like smallpox, a disease of the past.

This State needs more *capital*. It needs factories and other enterprises; where capital goes, labor will follow. With the Panama Canal in sight Louisiana bids fair to be one of the greatest commonwealths in the Union.

The climate of this section is very mild (northwest Louisiana) and anyone suffering with weak lungs not too far advanced would do well here. They could engage in some trivial business, like the poultry and bee business. This would give them exercise, sunshine and fresh air, in a mild climate; which, as we all know, are the sheet-anchors in the treatment.

Caddo parish has a good free school system nine months each year. Shreveport is to have the State Fair in November. The amount appropriated to date for premiums is about $15,000. One will see here most everything that grows in this section. If you can visit the State again, and especially the Fair, we would be glad to have you. In

Demanding free service as a right, thanklessly, is one thing; extending it as a courtesy to a poor colleague is another.

Free service rendered a doctor by his neighbor may be returned in kind; but regular fees should be tendered distant colleagues.

the country, quail and duck-shooting is the most sport we can offer to those who like it, during the winter months.

Referring to your letter, you are acquainted with the possibilities of Louisiana and what its future has in store; and if you would like to assist in finding homes for a few colonies for your northern friends, I would be glad to assist you at this end. I am only a country doctor, but always ready to help my fellowmen better their conditions. I would sell half of my lands to those wanting homes at reasonable figures, and if there are any colonies in mind will help to secure options.

We have several gas-wells near here. Shreveport is supplied with natural gas for all purposes. There is one large well about twenty miles away, that has been burning for several months. One can see it at night for thirty or forty miles in all directions.

FRED A. BAKER.

Greenwood, Louisiana.

—:o:—

I have been so deeply impressed with the opportunities in Louisiana awaiting brains, money and industry, that I will be glad to do everything in my power to further it.—ED.

REPORT ON A CASE OF CEREBRAL MENINGITIS.

August 14, 1906, at 6 p. m., I was called to see a child six months old. After getting a history of the case and after its examination I found it suffering from a cerebral meningitis with a temperature of 104½° F. I gave the child a mustard bath, then ordered iced cloths applied to the head and gave six ⅙-grain granules of calomel, one every half hour until all were taken, followed by a small dose of saline laxative after effervescence had ceased. I now put two granules of aconitine, gr. 1-124, and two granules of hyoscyamine amorphous, gr. 1-250, in twenty-four teaspoonfuls of water and ordered a teaspoonful every half hour for six doses, then to be given every hour till my next call, which was at 10 a.m., August 2.

I found the temperature 104° F., the bowels had moved freely but otherwise the conditions had not improved. I now gave calx iodata, gr. 1-3 every three hours, and ordered the aconitine and hyoscyamine given as the night before.

I called at 8 p. m. and found the temperature 104½° F. As I am a believer in the "dose enough" theory, I gave the following: four granules of aconitine and four granules of hyoscyamine and twenty-four teaspoonfuls of water and ordered one teaspoonful every one-half hour for six doses and then every hour. I called at 10 a. m., August 31, and found temperature 102° F. I ordered the medicines given every hour until 3 p. m., when it was to be given every half-hour till six doses were taken and then reduced to a dose every hour.

I called the next morning and found the temperature 101° F. I gave some calomel to be followed by saline laxative and ordered the aconitine and hyoscyamine to be given as the day before.

I called August 4, 12 a. m. and found the following conditions: Temperature 99° F. Bowels moved freely and the general conditions greatly improved. I now put the child on the following: aconitine two granules in twenty-four teaspoonfuls of water, a dose to be given every hour until my return.

August 5, 10 a. m., temperature normal, general conditions good. I now ordered the fever medicine to be given every two hours with calcidin continued and an occasional dose of calomel and saline. This was given every other day in addition to the above treatment. I applied cantharidal collodion behind the ears on the second day and gave a mustard foot-bath when required.

The fluid extract of jaborandi is inferior to the alkaloid in being more uncertain and more liable to nauseate.—H. C. Wood.

Different or even contradictory results may be obtained according to the alkaloids present in physostigma preparations.—Brunton.

When I called August 6, at 11 a. m., I found the child very much better, temperature normal, skin moist and the child began to take the breast for the first time. I now stopped the aconitine but gave the hyoscyamine and calx iodata as before with an occasional purge of calomel and saline.

I called August 8, and found conditions normal. I left a supply of calx iodata to be given ⅓ grain three times a day, for a week and gave the following: Hyoscyamine two granules, water twenty-four teaspoonfuls and ordered a teaspoonful four times a day until all was taken. I did not call again and discharged the child as cured.

My object in reporting this case is to call attention to the large doses of aconitine given to reduce the fever, which again proves the often repeated "dose enough" theory, not alone in giving aconitine but as regards all drugs. The sooner our medical men get into the habit of giving "dose enough" the better will be their results in treating disease.

W. F. Radue.

Union Hill, N. J.

"A QUESTION OF COST."

Doctor, I have been for several years trying to be an alkaloidal convert, but I cannot receive that "special converting power from above" (Chicago). I have used the alkaloids quite a good deal, sometimes got fine results and sometimes none at all. The great drawback to a more exclusive use of them I think is their cost. To show you, I wrote you a few days ago for diagnosis and treatment of two cases, and I counted the cost of the remedies suggested, which amounted to more than I would get out of the cases. I admire the alkaloidal remedies in many respects but this objection is a serious one to me. Please accept thanks for your excellent suggestions in the above cited diseases.

L. J. Spickard.

Blanchester, Ohio.

—:o:—

We have to recommend what might be needed in a case, but if we were treating the case, we might not use half of the medicines suggested and maybe but a few granules or tablets of each one so that you might well expect to treat a dozen cases out of the assortment recommended for one case.

The active principles are good, nothing can be better, and nothing is too good for the doctor. It is very wrong, however, for the doctor to prostitute and commercialize these professional services by making distinct charges for medicines except where he is giving an especially large quantity to cover a long period of time. No, no, make all the visits necessary, insist on your patients' coming to the office as often as you want them to come, giving them necessary medicine but only enough for the interval, charge a good round price for your services and, as a rule, never thinking of charging for medicine any more than a carpenter would think of charging for what he files off his saw when he does a week's work for you.

We trust that you will look at this thing in the right light, Doctor, and that out of the inspiration of these suggestions some good may come.—Ed.

ARE YOU FOLLOWING THE CALF?

The reason why some still "follow the well-beaten paths" is evidenced in the following verses, written by Sam W. Foss:

One day through the primeval wood
A calf walked home, as good calves should,
But made a trail all bent askew,
A crooked trail, as all calves do.
Since then two hundred years have fled,
And, I infer, the calf is dead.
But still he left behind his trail
And thereby hangs my moral tale.

Emetine causes a catharsis not obtainable from ipecac, in which the crude vegetable matters hinder this action.—Husemann.

The new announcement of the Michigan College of Medicine and Surgery has Dr. J. A. Patton as Professor of Therapeutics, etc.

The trail was taken up next day
By a lone dog that passed that way;
And then a wise bellwether sheep
Pursued the trail o'er vale and steep,
And drew the flock behind him, too,
As good bellwethers always do.
And from that day, o'er hill and glade,
Through those old woods a path was made.

And many men wound in and out,
And dodged and turned and bent about.
And uttered words of righteous wrath
Because 'twas such a crooked path;
But they followed—do not laugh!—
The first migrations of that calf;
And through this winding woodway stalked
Because he wabbled when he walked.

The forest path became a lane
That bent and turned and turned again.
This crooked lane became a road
Where many a poor horse with his load
Toiled on beneath the burning sun,
And traveled some three miles in one.
And thus a century and a half
They trod the footsteps of that calf.

The years passed on in swiftness fleet—
That road became a village street,
And this, before men were aware,
A city's crowded thoroughfare.
And soon the central street was this
Of a renowned metropolis.
And men two centuries and a half
Trod in the footsteps of that calf.

Each day a hundred thousand route
Followed the zigzag calf about,
And o'er this crooked journey went
The traffic of a continent.
A hundred thousand men were led
By one calf, near three centuries dead
They followed still his crooked way
And lost one hundred years a day.

For this such reverence is lent
To well-established precedent.
* * *
A moral lesson this might teach,
Were I ordained and called to preach;
For men are prone to go it blind
Along the calf-paths of the mind,
And work from sun to sun
To do what other men have done.
They follow in the beaten track
And out and in and forth and back,
And still their devious course pursue
To keep the path that others do.

There's a new trail which leads straight to therapeutic success. We've kept it blazed. To make it the beaten road—a straight highway to success—is your labor. Why should anyone still follow the turns and twists of galenic precedent?—Ed.

INCOMPATIBILITIES IN DRUG PREPARATIONS ON THE MARKET.

It seems strange in these days of advanced knowledge of pharmacology that there should be so many preparations used containing incompatibilities. But such is the condition of affairs; and not only in the older preparations, but in newer ones as well.

This fact is another argument in favor of the stand taken by The American Journal of Clinical Medicine. As to the method of giving drugs, the preparations can well be divided into two classes: First, those made by reliable manufacturers who make standard formulas, or in case of a specialty give the formula in their catalogue; second, the so-called proprietaries whose formulas are not always given, and when given are not always correct, as has been shown repeatedly by analysis. This latter class will not be considered, as it is a waste of time.

Incompatibilities can be divided into: (1) chemical and (2) physiological. The chemical can best be divided into four classes:

1. The effects of acids and alkalies.
2. The effects of oxidizers and reducers.
3. The effects of precipitating agents.
4. The effects of ferments.

The physiological can be divided into those preparations containing drugs which in their action are so antagonistic that their therapeutics must be slight, and those preparations containing drugs in such small doses as to be of no value. Some preparations have more than one incompatibility.

In considering the actions and doses of drugs, while numerous works have been consulted, I shall follow that most admirable work on Pharmacology written by Dr. Arthur

Individual roots of either Rio or Carthagena ipecac vary as much in proportions of alkaloids as the two do.—H. C. Wood.

While emetine causes a fall of temperature that of the intestinal canal remains stationary or rises.—Pecholier.

R. Cushny of the University of Michigan. In this work can be found excellent bibliographies on the subject.

The first incompatibilities to which I invite your attention are found in the ferment mixtures. Pepsin is extensively used in spite of the fact that it is now conclusively proved seldom to be absent from or diminished in the stomach. For a verification of this consult any of the recent works on gastric diseases, as Einhorn, Ewald or Riegel. However, this paper is not on therapeutics or pathology and this fact does not concern us. Pepsin is destroyed by alkalies, yet we see a number of compounds of pepsin with alkalies.

Pancreatin is destroyed by mineral acids, such as the HCl of the stomach contents, and yet it is used rather frequently. As to the use of sodium bicarbonate with it, the doses of soda are altogether too small to offer any protection. Pancreatin is also destroyed by pepsin.

Remembering these incompatibilities, notice the following preparations:

1. Liquid pancreo-pepsin (Wm. R. Warner) contains pepsin, pancreatin, lactic acid, muriatic acid.

2. Tablets (Wm. R. Warner) contain pepsin, bismuth subnitrate, calcined magnesia and ginger.

3. Elixir of pepsin and pancreatin (Parke, Davis & Co.) contain 40 grains of saccharated pepsin and 16 grains of saccharated pancreatin in each fluid ounce.

4. Tablets (Parke, Davis & Co.) contain 1 grain of pepsin and 3 grains of bismuth subnitrate.

5. Elixir of pepsin and pancreatin (Sharp & Dohme).

6. Tablets (Wm. S. Merrill) contain 1 grain pepsin, 2 grains charcoal, and 2 grains of sodium bicarbonate.

There are similar preparations made by other firms.

At times we see preparations with chemical incompatibilities:

Elix. Salicylic comp. (Wm. R. Warner), containing acid salicylic, cimicifuga, sodium bicarbonate, potassium iodide. The sodium bicarbonate will surely combine with the salicylic acid, forming sodium salicylate. There is no objection to the sodium salt, but the doctor is not getting what he believes he is.

There is a vaginal tampon listed in John Wyeth & Brother's catalogue, containing morphine and tannic acid. Tannic acid precipitates morphine and is used as a chemical antidote in poisoning by alkaloids.

Sharp & Dohme list a pill with this formula: Opium, gr. 1-2; tannic acid, grs. 3; lead acetate, gr. 1-2.

The same reaction evidently takes place here, rendering the opium inert.

Henry K. Wampole manufactures a diuretic compound under the name of "renatone," containing in each dose 2 grains of hexacystin and 1 grain of potassium nitrate. Aside from the fact that the doses are very small, I believe a chemical incompatibility to exist. Hexacystin is a condensation product of ammonia and formaldehyde. Aldehydes are easily oxidized and nitrates are strong oxidizers. I do not believe hexacystin and potassium nitrate are compatible.

Wm. R. Warner has on the market a powder for surgical dressings named "iodoformal." They state that it contains bismuth oxyiodide and "boro-formaldehydé;" also phynylacetamide, which is acetanilid, and phenic acid or carbolic acid. They state that it liberates iodine, formaldehyde, thymol, and phenic acid, and that it is nontoxic. I fail to understand two things: How with an oxycompound present the easily oxidized formaldehyde can exist or be liberated and remain as such. Also with acetanilid and carbolic acid how it can be altogether

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While cephaeline acts violently upon the lungs, after death from pure emetine no pulmonic changes are found.—Carl Lowin.

The general physiologic action of ipecac is extremely feeble, although its alkaloids are certainly very active substances.—H. C. Wood.

non-toxic. See reports in the *Journal of the A. M. A.*, February 3, 1906, by Herrick and Irons, and August 4, 1906, by R. Max Goepp, of the action of acetanilid as an application.

Sodium bicarbonate is often given with calomel and other drugs. The object is evidently to protect them against the stomach acids, as it is immediately neutralized by these acids, and loses its identity, forming sodium chloride. It is easily figured out that the amount used is many times too small to neutralize the amount of acid normally found in the stomach.

There are other preparations that contain amounts of certain drugs that are so small as to be worthless. An example of this is the tablet put up by various firms containing one-tenth grain doses of sodium bromide, while the amount of acetanilid is sufficient.

What I believe to be an insult to our profession is the offering to us of the shot-gun mixtures, of which there are many on the market. These often contain physiologic and therapeutical incompatibilities. Many contain stimulating or tonic and depressing drugs. Or vasoconstricting and vasodilating drugs. Or cerebral exciting with cerebral depressing drugs.

How often we read about a preparation that is beneficial for both amenorrhea and menorrhagia. How many there are that are said to be tonic and antispasmodic.

And the number of cough mixtures containing both stimulating and sedative expectorants is surprising. The use of such mixtures is certainly groping around in the dark and is most unscientific. We should decide for ourselves in each case just what drug and just what dose is necessary and use it. Use an adjuvant if necessary, and use enough to get the desired result.

J. Wirt Robinson.

McCammon, Idaho.

The great likelihood of incompatibility in prescription writing, and even, as shown by Dr. Robinson in this article, in the ready-made tablet or pill, is one of the strong arguments in favor of the use of the single remedy, given to meet specific conditions and repeated until its physiologic or therapeutic action is manifest.—Ed.

THE CIRCULATION OF CLINICAL MEDICINE.

I presume you often wonder how widely your journal is read by the profession, and whether they appreciate what you are doing for us as a whole. I know I would in your place, and as a straw, "to show which way the wind blows," I wish to call your attention to a few facts that have recently become known to me in a totally unexpected way.

In the May number of The American Journal of Clinical Medicine (a name by the way which I do not like as well as the old "Clinic," you published an article written by your humble servant, under the heading, "Some Experiences From Every-Day Work." I was away from home on business during the months of May, June, and most of July, and on my return found an unusually large mail that had been laid aside for me, as it was of a nature that did not require immediate attention.

One hundred and eighty-two letters were from physicians from nearly every state in the union, and some bearing foreign stamps, commenting on the article above mentioned. I was astonished. When I wrote you I had no intention of writing for publication, and merely stated facts about elimination and treatment of some interesting cases.

Some of the letters criticised the treatment; some found fault with me for tearing a hymen in a virgin. One good old man

Local inflammations are much less likely when hypo. solutions are thrust boldly and deeply into the part.—Hare.

I have seen a man made very sick by taking a hypo. of cocaine solution that had been boiled.—Howland, *Ill. Med. Bulletin.*

(of the old school) said, "By what right do you tear through God's certificate of character, given to that virgin to carry to her future husband as a certificate of chastity?"

Four of these letters questioned my veracity, saying that "no woman could carry twenty pounds in her alimentary canal." I never said she did. Or if I did I perhaps failed to elucidate. I said that "on the third day she weighed twenty pounds less than when I began the treatment." Perhaps the statement does need a little explanation.

I do not know just how much an impacted colon will hold, and I do not believe any one does; but I do know that when a man or woman has been making a walking privy of themselves for months, the elimination of waste material when you get busy with cathartics, enemas, diaphoretics, diuretics and baths, and keep it up for three days is enormous, and the patient may lose more than twenty pounds, for it often occurs in my sanitarium in the treatment of drug cases.

I did not wilfully make any statement that is not true, but if I said that "she had been carrying twenty pounds in her colon, for God knows how long," and I presume I did, I might qualify it by saying that she had been carrying that amount of waste material in her "Department of the Interior" for that length of time. I have no quarrel with these good doctors. I answered the four, but the others required no answer, and I am gratified, and I hope you are at this evidence of the fact that the physicians who get the journal, not only read it but think about what they read. Some of the letters, and postal cards simply said, "I have had similar experiences but neglected to report."

Others said, "I have found the alkaloids, and specialties of the Abbott Company reliable and safe, and shall continue to use them." Others said things I shall not repeat, as they might make even you feel "stuck up."

Altogether the pile of letters and cards might have furnished you with some enjoyable reading, and it is seldom my waste basket has received such a stack of letters so unexpectedly.

I am not in general practice, but occasionally I am consulted in obscure cases, and recently I called to see a young lady who was considered a hopeless case a year ago, and I never saw a finer specimen of womanhood than she is now, and her recovery is due to a little horse sense, which I brought to bear on the case, and the judicious use of the "triple arsenates with nuclein" after a thorough process of elimination to begin with, and proper attention to it afterwards. And, strange to say, I was called in consultation with two college professors of the strictest ethereal type, and they were letting this young lady die—scientifically! Ye Gods and little fishes! How they did kick against the pricks before they would even consent to let me see the girl, and with what wonderful unanimity they took to themselves the credit when she began to gain.

A man is generally judged in this world, and I believe he will be in the next, by what he stands for in his daily life. If we all stand for the principles of right living and well doing, subscribing to the teachings of the "Man of Galilee" and *act* what He illustrated by His daily Life, we are acting by a code that is good enough for me, and I have never yet been jealous of another physician, or tried by word, deed or other act, to rob him of the credit that was his due; and God deliver me from the man who does such an act, be he physician or layman.

GEO. D. SWAINE.

Cleveland, Ohio.

Unless you are looking for trouble or have had experience with an expert let mercurial hypos. severely alone.—Howland, *Ill. Med. Bulletin.*

Landers reports a cure of impotence from clearing the bowels and giving nuclein and triple arsenates.—*Ill. Med. Bulletin.*

Dr. Swaine writes us that he advertises. We are sorry, for we believe he is too good a man to go about the difficult task of "getting business" by methods which all of us cannot approve. A month or two ago we told our readers exactly how we feel in matters of this kind. In the long run this advertising business doesn't pay—no matter how much money you make. We believe in the "code" because we believe that it is founded on that higher law which "the Man of Galilee" came to teach. The misinterpretation of that law by the "ethical cranks" does not affect the principle.

There is a lot of good hard, horse sense in this and the preceding article, which we (and other readers of CLINICAL MEDICINE) appreciate. That was shown by the correspondence which it stirred up.—ED.

BUSY—BUT HAS "TIME TO READ."

This is my first attempt at writing anything for your valuable JOURNAL. I take several medical journals and must say that I am not like the doctor you roasted so for saying: "Discontinue your journal for I have not time to read it." I read all and can hardly wait for its arrival. I read it from cover to cover. I don't see how I could get along without it. I book from $200 to $300 per month and find plenty of time to read my journals and now and then add a new book to my list.

A few words concerning pneumonia. I use quinine, but add hydrastis and capsicum.

I was called to see a young girl, age 14. Pneumonia, right lung, rales clearly perceptible. Rose flush, frequent cough, rusty sputum, respiration 34. I gave number two capsule quinine, capsicum, and hydrastis, four hours apart, first day; then every six hours for three days, with 1-6-grain calomel, 1-12 podophyllin every hour for eight hours followed by salts, repeated every day for three days. Second day put her on milk diet. Fourth day pneumonia subsided. Temperature 100° F., respiration 22. Sputum still rusty. Left case in hands of nurse. Ninth day up.

Now I can't believe much in aborting pneumonia; this is as near as ever I have come to aborting pneumonia.

I use the alkaloids. Don't see how I could get along without them. As the populists say, they are safe, sound and flexible, if you push them to effect. I was glad of a chance to send in an extra dollar to help reimburse the valuable old CLINIC and help bring her out in her new dress and new name. I like it. More anon.

P. M. HAWKINS.

Craig, Texas.

—:o:—

Try the real "alkaloidal way" in your next cases of pneumonia, Doctor, and you will have more faith in the possibility of aborting the disease.—ED.

STATE BOARD EXAMINATIONS.

In looking through the October number of your journal I became interested in the editorial (page 1273) entitled "State Board Examinations," discussing the subject from the standpoint of the old practician who, wishing to remove to another state, finds himself unable to do so because he cannot pass the state board examinations.

I have seen similar articles before and cannot help feeling that there is a good deal of false sympathy and sentimental nonsense wasted on this type of old practician. The old practician that you describe, "who graduated from the best school of his day," "who has given his whole time and thought to his duties,"

Baptisia has always been regarded by Eclectics as a remedy possessing valuable properties, in all low forms of disease.—*E. M. J.*

Most medical men will testify that they received no instruction in prescription writing prior to graduation.—State Board *J. of A.*

and "who has passed his life in the useful and honorable practice of his profession," should have no difficulty in passing any state board examination.

Such a man of course subscribes to a number of good medical journals, increases his library every year, attends at least his county and state societies and occasionally takes a short post-graduate course. If he does not do these things he does not by any means meet the description quoted above.

Now many of the state boards make an allowance of 5 per cent for every five years of medical practice which in the case of a man who has practised twenty years or more reduces the requirements to a minimum. As to the examinations themselves—I have taken those of Iowa and Illinois and I have seen those of other states published in the *Journal of the A. M. A.* They are usually a farce. The physician who cannot pass them, no matter what the length of time since his graduation, is either lazy or deficient. They are so elementary that any medical man who has some foundation on which to base his study should be able with a half dozen quiz-compends and a couple of weeks cramming to prepare for any of them.

The men who give these examinations are not specialists or teachers. They are usually general practicians and men who who have been in practice many years. The questions on chemistry and pathology are usually simple and practical, in fact at the examination before the Iowa State Board the only complaint I heard from those taking the examination was of the use of obsolete terms and nomenclature not to be found in the newer text-books.

Experience alone does not quailfy anyone as a practician of medicine. There are filthy midwives in Chicago who have delivered as many women as DeLee or Webster. The physician who knows nothing of chemistry can have no real knowledge of drugs and knowing nothing of pathology can never be a good diagnostician.

The same outcry was raised when the movement to improve the public school caused the dismissal of many teachers who had been in service thirty to forty years and could not obtain certificates. They had experience but no education according to modern standards. They could easily have kept abreast of the times by a little work and summer courses but they were lacking in ambition and were finally dropped.

The fact is, the old practicians who fail at the state board belong usually to that unfortunately large class of men whose libraries consist of the books owned when they graduated from college, who take no journals, never attend a medical society meeting and imagined that when they left school they were equipped for life.

To men who do not study, experience has merely the effect of placing them in a rut. Their therapeutics are always as obsolete as the rest of their medical knowledge and their ignorance of pathology and bacteriology make them more dangerous to a parturient woman or even a case of minor surgery than the youngest and most inexperienced graduate. The public is better served without them.

CARL W. WAHRER.

Fort Madison, Ia.

—:o:—

The fact that some boards allow for time spent in practice does not alter the injustice shown by boards which do not. And as a matter of fact, only a few boards make this allowance. No post-graduate school exactly covers the requirements of state board examinations. There is evidently a need for special institutions for such instruction.

A Russian prison doctor reported the prison in bad sanitary conditions; they promptly dismissed the doctor. Civilized?

Optimism is good for a man's digestion, his nervous system, and thereby aids the proper working of every function.—Wilson, Ia. *M. J.*

The difficulty with the state boards as a rule appears to be a misconception as to the nature of the examination they should give, hence they err either on the side of preposterous requirements or ridiculous ease.

The general practician should be considered a man who has devoted himself to the specialty of bedside practice. He should no more be expected to pass a laboratory examination than the dentist should be expected to pass on general practice and surgery. General practice is a specialty as well as any other, but more than any other it is so exacting that to do justice to it and succeed, it must be an absolute specialty, to which the physician devotes himself exclusively; and here is just the difficulty: If he has done this he cannot pass the state board examination. Dr. Wahrer's letter, however, shows that there are two sides to the question, and to a certain degree we must agree with him—many old practicians have not kept up with the times even in their own specialty, but have taken things as easily as possible instead of stretching their powers to the limit to keep up with the procession. Regarding such men examining boards are certainly a great boon to the people of their states. It is evident that Dr. Wahrer has come in contact with enough of this class to form his opinions concerning the matter.—Ed.

A CASE OF PNEUMONIA.

You ask for a report of a case of pneumonia. Well, if I get it off on today's mail it will have to be short. Patient, male, age 23, blacksmith. Severe and prolonged chill about 2 a. m., November 20, 1905. Pain in upper lobe of right lung, cough. Sputa mucous, frothy and rusty at times, more or less streaked with blood. Temperature 102.6° F., pulse 140, respiration 38 to 40, short, shallow and jerky. I first saw him at 8:30 a. m., November 21, 1905. Diagnosis pneumonia.

Treatment.—Aconitine, gr. 1-134: veratrine, gr. 1-134; digitalin, gr. 1-67; one granule of each every half-hour until temperature dropped, pulse softened and skin became moist; then same dose every two or three hours. To move bowels gr. 1-6 each calomel and podophyllin every half-hour for six doses, i. e., till one grain of each was taken, followed in one to two hours with a teaspoonful of saline laxative to be repeated in an hour if needed; later, one teaspoonful of saline every six hours. As soon as bowels move freely, give one tablet of the sulphocarbolates of zinc, lime and soda (i. e. intestinal antiseptic), crushed, every hour for eight to ten hours. Then one of the sulphocarbolate tablets every two or three hours, alternating with two zinc and codeine tablets. Later on, as needed, strychnine arsenate and caffeine citrate to strengthen and steady heart action.

After first twenty-four hours pulse and temperature dropped to normal and stayed from normal to 99 1-2° F. Cough less and expectoration free from use of one to three granules of modified Dover's powder granules.

On the morning of the third day patient was slightly delirious, having passed a sleepless night. For the delirium I gave two granules of hyoscine hydrobromide, gr. 1-1000. In half an hour one more of same, which produced a quiet, restful sleep, lasting four to five hours, when he woke up bright and clearheaded, called for something to eat and went to sleep again for about two hours.

From then on I gave one granule of hyoscine every six to eight hours and had no more light-headedness, excitement or delirium. The patient remained in bed

A physician contributes most materially to the optimism of his patient by making him well, to be sure.—Wilson, Ia. *M. J.*

The united doctors of Webster City, Iowa, beat the telephone company, which tried to induce competitors to flock there.

only eighteen days and was back at the shop at work in three and one-half weeks and has remained well and strong; no cough nor trouble with lungs at all.

J. N. Mallory.

Emily, Minn.

—:o:—

'Way along last spring we published a lot of interesting reports on the treatment of pneumonia by "the alkaloidal way." They aroused a great deal of interest and letter after letter kept on coming from our readers. We wanted to use them all but just—couldn't. There wasn't room enough! However we kept some of them as they were too good for the wastebasket. Now we give you a few of them. The pneumonia season will soon be here again and it is time to be thinking this matter over, and it's well to remember that the alkaloidal method *cures*.—Ed.

QUININE MURIATE IN PNEUMONIA.

Dr. Heacker of Tate Springs, Tenn., says that the injection of muriate of quinine (three to four grains hypodermically) in desperate cases of pneumonia with frail pulse, dyspnea, etc., will cure in fifteen minutes—never fails. This sounds too good to be true but we hope the family will note the report and test the remedy.—Ed.

ISN'T THIS WORTH WHILE?

After many nights of broken rest among my patients, I write you that the alkaloids, in my opinion, have saved the lives of a few of my neighbors' little ones. I wrote you some time ago that I had several cases of pneumonia complicated with follicular tonsillitis, of which I have treated more than a dozen cases since. At present the malady seems to be giving way. I have not lost a case so far. There have been two deaths here, but not my cases. Another doctor diagnosed his first case as diphtheria; it died. He has treated other cases and lost two. I have lost none. My treatment has been alkaloidal; his, the old style.

The malady here has been general this season among the little ones. My treatment is simple but generally overlooked by the fraternity. I first examine the tonsils, and, if indicated, spray with peroxide of hydrogen; give calomel in minute doses and calcium sulphide to saturation. Have had no case remain in bed over three days, unless there were other complications.

I have a case of worms that I wish you to help me treat: A ranchman says he passed a tapeworm, head and all, sometime during last August. He says since that time he has been passing worms, occasionally, similar to angleworms, from two to three inches in length. I prescribed calomel, podophyllin, santonin, etc., but he says they continue to come occasionally.

A. W.

——, Texas.

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Allow us to congratulate you, Doctor! You have justified the faith the parents of those sick little ones placed in you. The alkaloidal method of treatment brings results whidh makes us all enthusiasts.

Better get some of those worms and forward them so that we may be quite sure as to what you are dealing with. In the meantime, Doctor, give this man the Barron's "worm remover" formula; two granules at 7, 8, and 9 p.m. and a full saline flushing the next morning, preferably in hot water, then one every hour during the day, say, for six or eight doses, then another good saline draught. After a week, if any sign of worms, repeat the treatment. If these are lumbricoides this method will get rid of them "root and branch." If tapeworm

Simon reports favorably on the treatment of prurigo with pilocarpine by hypodermic injections. —*N. Y. M. J.*

The period of constructive pharmacology has scarcely dawned; at present its chief function is destructive and critical.—Cushny.

however, is present, it will not be effective: A distinctive "tapeworm remedy" is needed. —Ed.

THE TREATMENT OF PNEUMONIA.*

Owing to the fact that it would make too long a paper, and also to the fact that we are all pretty much agreed on these points, I shall omit the discussion of the history, etiology, morbid anatomy, histology, symptomatology, diagnosis and prognosis; but will confine my remarks to a discussion of that division of the subject upon which medical opinion is most at variance.

Treatment.—In pneumonia, as in other diseases, no single plan of treatment can be applied to all cases, but each individual case must be treated on its merits; each case, each individual, is a law unto itself. But if we have gained nothing from the studies of the past decade in the rational treatment of pneumonia, there has been, to say the least, a vast amount of time and energy spent to no avail.

There are many points in the practice of medicine on which professional opinion is widely divergent, but in no case is this more evident than in the treatment of pneumonia.

All our standard text-book authors, including Osler in his revised edition, with the laboratory specialists and their followers, are lined up on one side in the war of words, firing salutes to the flag of therapeutic nihilism concerning the treatment of pneumonia; while on the other side we find a smaller but rapidly increasing number of enthusiastic advocates of an active treatment of this disease, who are proclaiming with equal vehemence that there is much that can and is daily being done for its relief. They, as Abbott says, prefer to be empirical successes, rather than scientific failures.

On the other hand are those who regard pneumonia as a self-limited disease, running its course in from five to nine days, entirely uninfluenced by anything that may be done, aside from sustaining the patient. On the other are those who have every confidence in their ability to combat this disease with even greater success than many other diseases.

H. C. Wood has timidly advocated the idea of "bleeding the patient into his own circulation," and for this purpose he advises the use of veratrum viride. By others it was just as timidly advocated that possibly medicines that would stimulate or inhibit the vasomotors might be of service in the treatment of this disease. This hypothesis has been gradually raised to the dignity of a theory, and, in the minds of many of our ablest thinkers, to a well-established and great fact, a truth as full of consolation as the psalms of David; as soothing to the overwrought brain of the physician as the syrup of Mrs. Winslow to the colicky babe.

Most prominent among this latter class is Dr. W. C. Abbott, of Chicago, and his article in last November's Clinic is worthy of most careful study and a thorough trial of the principles he advocates will convince the most skeptical that pneumonia in its early stages can be aborted; and that seen later, the duration can be very materially shortened.

As the whole volume of blood is not increased, the pulmonic congestion must be at the expense of some other part of the body. By some unknown influence, probably toxemic, the vasoconstrictors in the congested area are inhibited, and the vasodilators are stimulated, while in the remote anemic area, which has been drained by the pulmonic congestion, the reverse exists in regard to the vasomotors. There is an unbalanced condition in the nervous control. It is evident that any relief to the

*Read before the Whitman County Medical Society, Jan. 22d, 1906.

Observations in Bombay show that the plague is carried to animals and to man by the fleas infesting the rats.

Williams says that the spleen is good food, tasting like liver but better, and possibly aids to prevent consumption.—*Med. Age.*

distressed areas must come through a restoration to the normal of the vasomotor centers and distribution. We thus have two diametrically opposed conditions to meet at the same time and on casual observation this seems impossible. Burggraeve claims that both these operations can be carried on at the same time, in the same patient, by relaxing the spastic vessels with aconitine and contracting the paretic vessels with digitalin, each affected cell selecting from the blood the molecule of the remedy needed to restore it to normal equilibrium.

It is not imposing any new obligation on Dame Nature to expect her to select the remedy which is needed for the repair of each affected cell, since she has been separating the various elements from our food and applying it where needed to build or repair bone, muscle, nerve, etc., ever since she first made her debut into the animal kingdom. We therefore give vasodilators and vasoconstrictors at the same time and confidently expect that the aforesaid Dame will make the proper selections and applications. There are a number of remedies in each class to select from but perhaps the best of the dilators are aconitine and veratrine; and the constrictors are strychnine and digitalin. These, therefore, constitute the dominant treatment, giving aconitine in doses of 1-134 grain, with digitalin 1-67 grain, and in sthenic cases veratrine, 1-134 grain; or in asthenic cases strychnine arsenate, 1-134 grain. This dose is repeated every fifteen or thirty minutes until temperature is reduced to near the normal and the pulse to near eighty.

The usual calomel purge, followed by saline, should not be neglected throughout the entire course of the disease; but especially at the onset. To this should be added as a routine treatment some form of intestinal antiseptic; and of these I prefer the sulphocarbolates of lime, sodium and zinc. For cough and pleuritic pain, codeine, bryonin and hyoscyamine will prove satisfactory. In broncopneumonia of children and the aged I should add to the dominant treatment, iodized calcium, 1-3 to one grain, every two hours until all catarrhal symptoms have disappeared. Diet should be of the most concentrated and nourishing forms, and the amount of liquids, including water, should be restricted until the lung is depleted. The depletion should be aided by enemas of saturated solution of magnesium sulphate. As a matter of protection to the chest I find nothing better than the ordinary cotton jacket, well greased. In conclusion I would say that the doctor who studies his cases thoroughly, meets the conditions as they arise, and treats them according to the outline herein given, will ere long be of the opinion of Dr. Abbott, that "There is a treatment for pneumonia, a treatment that is effective, that is easily applicable and affording results that can scarcely admit of improvement."

L. J. Coberly.

Garfield, Wash.

AUTOTOXEMIA COMPLICATING PNEUMONIA.

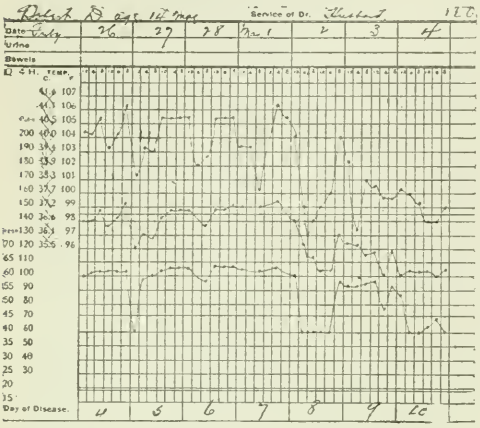
I am sending you herewith a temperature, respiration and pulse chart from a case which occurred in my private practice on the date appended on the chart. It was a most interesting case, and to me the wide variations in temperature from almost 107° F. to 97° F. in less than fifteen minutes (which, of course, can not be shown on chart) present features of interest.

The boy was taken sick about twelve hours after the ingestion of his usual feeding with a certified milk. Vomiting was the prominent symptom at the beginning, later

Garland says salicin is more likely than salicylates to prevent heart disease after rheumatism. —*Brit. Med. Jour.*

Chicago mortality, June, 23, 10.76 per 1,000; and hospital population the lowest in three months.

a consolidation in the lower left lobe of lung developed. Constipation almost absolute; extreme meteorism, the high rectal tube



bringing away immense quantities of gas. My diagnosis was acute autotoxemia with complicating or secondary pneumonia.

Recovery perfect.

The treatment is too long to be detailed here but was principally symptomatic. I hope this chart will interest you as much as it does me.

ALFRED E. HUBBARD.

Brooklyn, N. Y.

PNEUMONIA ABORTED; CAPILLARY BRONCHITIS.

PATIENT SUCCESSFULLY TREATS HIMSELF.

Again I am pleased to report another case of pneumonia aborted, and that in my own person. The first of the week (Tuesday) I was taken sick, chill, fever, pain in side, cough, soon accompanied by brick-dust sputa. I began immediately with the mild chloride followed by saline laxative, reduced my pulse with the defervescent compound, taking a full dose of nuclein night and morning with strychnine arsenate as a "bracer." Today, Friday, my tongue is clean, and I am fully convalescent. There is nothing unusual about my case; I have done the same thing in a number of cases this winter, but I could not help but be impressed by the celerity and ease with which I controlled the heart's action with the defervescent compound, and how quickly all the symptoms disappeared after its control.

I wrote the forepart of this hurriedly, in an effort to make this morning's mail; but as I have failed in this and cannot get my letter off before tomorrow morning, I will report a rather unusual case of capillary bronchitis, the real, or usual, pneumonia of childhood. A girl, ten months old, was standing by the stove pushing a chair, playing, apparently, in perfect health; she was suddenly seized with violent choking, becoming so agonized that the parents thought she had a foreign body in the larynx. On my arrival, a few moments after seizure, I diagnosed spasmodic croup, and gave calcidin, which soon relieved the symptoms, but attacks recurred several times during the day. As the day advanced the fever advanced, until by night the temperature was, I think, 102° or 103° F. (I had broken my thermometer) and all over both lungs were subcrepitant and mucous rales. Recurring attacks of croup continued for two days, but with lessening frequency. In a few days the stuff she "coughed up" and swallowed seemed to get very tough and sticky, so that when a lump of it would lodge near the larynx with each breath it would "flop," sounding to the parents as though there was a foreign body there, and although I explained it to them, yet to down the question I called a consultant. The little patient gradually lost strength, fever rising to 105° F. toward the last, and finally died, apparently from exhaustion.

The treatment pursued all through the case was as follows: One-half-grain doses

Keen described 25 cases of malignant tumors developing in moles or warts, apparently innocent growths.

Col. Girard strongly advocates hypos of strychnine, gr. 1-60, and atropine, gr. 1-120, for seasickness.—*J. A. M. A.*

of calomel and soda, followed by saline; for fever, aconitine alone, later aconitine with gelsemin, later digitalin, expectorants, apomorphine, emetine, ammonium chloride. Emesis was produced almost every evening, without prostration. A greased cotton-jacket was worn almost from the beginning. Only twice during the sickness was I successful in affecting the pulse by medicine. The disease stalked on over all hindrance to the end. Now, was there anything left undone or too-much done? Criticise.

The family numbered seven children, all small; one hired hand. They all lived in one room. The man is not poor, but there are few mansions in this country, so the patient was continually exposed to the draughts of the children's running in and out, with the noise of their squabbles, the air being made irritating by frying meat and burning grease. The room would be excessively warm at one time, then grow cool, the one window not well glazed, occasional tobacco smoke until it was stopped, and several unkind influences. I forgot to say the patient took nourishment well, and that to the rest of the treatment was added the intestinal antiseptics. Please criticise.

A. T. Dobson.

Trail, Oklahoma Territory.

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The outline of treatment is o. k. If calx iodata and apomorphine were pushed "to effect," and sustaining agents properly used, little else could have been done. It was the surroundings that killed the child—especially the uneven temperature.—Ed.

A CLEAN SLATE—NO DEATHS FROM PNEUMONIA.

In the February number of the Journal you asked us to report cases of pneumonia, so I will write a few.

I was called to see Chas. N., age 5 years. When I arrived the little fellow was found suffering from pneumonia of the lower lobe of the right lung. Respiration was short and fast; temperature 103° F. I gave him small doses of calomel and followed with oil to act on the bowels, and dosimetric trinity every half hour till the fever began to go down, then less often. Calx iodata was given for the cough, and I had the mother put on the chest a saturated solution of warm epsom-salt water on a soft cloth, to be changed every hour till the pain in the chest was somewhat relieved.

I called the next day and found the patient resting much better. Fever had gone down to 101° F. The cough was loose. I told the mother to continue the calcidin and the fever solution till the fever was down. Next evening the child had no fever, seemed all right, was looking at some pictures in a paper, and wanted to get up and eat something.

Mr. C., a school teacher, came home from school Wednesday evening, complaining of feeling sore and aching all over. I saw him Thursday morning. He had a badly coated tongue and temperature 102° F.; said he hurt all over but no particular place in lung. No cough. Diagnosis, malaria. I gave six 1-6-grain granules of calomel every half hour, followed with a teaspoonful of sodium phosphate in hot water, until the bowels moved freely. Also quinine arsenate, gr. 1-6 every two hours. I saw the patient the next day, just about the same time, and continued the treatment, with the addition of dosimetric trinity for the fever.

Saturday morning his grandfather came down early, and said that the patient had severe pain in his side and wanted me to come right away and also to send for counsel, their family doctor. When I arrived I

Such food as is most grateful though less wholesome is to be preferred to that which is better though distasteful.—Hippocrates.

More importance is to be attached to the desires and feelings of the patient than to doubtful and fallacious rules of our art.—Sydenham.

found pain, tenderness, and dulness in the left lower lobe of the lung, respiration impeded, temperature 103° F. Hacking cough, but not expectorating any. Diagnosis, pneumonia. Council suggested putting antiphlogistine on the chest, which was applied and kept up. Dosimetric trinity was given every half hour till fever was reduced, and then less often; I also gave creosote, three drops every three hours. The next day the patient suffered very much pain; the fever had gone down some, but he was coughing considerably and was expectorating brick-dust sputa mixed with blood. Next day, Sunday, he was much better. I kept up the same treatment, adding strychnine arsenate, gr. 1-67. Next evening, Monday, the fever was gone. Not much pain, coughing a good deal, spitting some blood, but felt better in every way. I kept up the same general treatment, only dropped the fever solution. Tuesday the patient was all right, lung had cleared up and he will be able to resume school, Monday next.

Case Number Three: I was called to see a boy ten years old who had a chill the day before. Fever 104° F., tongue badly coated, respiration short and quick. Pain and tenderness in the lower lobe of the left lung. I prescribed calomel in 1-4-grain doses till four doses were taken, followed with syrup of rhubarb till bowels moved freely. I had put on the chest a cloth saturated with equal parts of turpentine, coal oil and lard. For fever, I gave dosimetric trinity every half hour till the fever began to cool, then less often; also creosote, two drops every three hours, strychnine arsenate, gr. 1-134 every three hours. Next day the temperature was down to 102° F. I kept up the same treatment, and in five days the boy was well.

I treated several cases of pneumonia last year on the same lines and never lost a case; nor have I lost a case since I have used the alkaloidal treatment. I have just as good success with the turpentine solution on the chest as any other application. It seems to ease the pain and loosen up the expectorate. J. M. Hawk.

Waketon, Tex.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

We have received the preliminary program of the next annual meeting of this strong society, which will be held in Hot Springs, Ark., November 6, 7 and 8. A very fine program is presented and among those who will take part we notice the names of many of our best men from Chicago, St. Louis, Louisville, Indianapolis, Kansas City Memphis, Detroit, New Orleans, Nashville, etc. Every physician who can possibly arrange his affairs so as to attend this meeting should do so. Little Rock is a delightful place, special railroad rates have been arranged, and a good time, as well as a profitable meeting, is assured.

ANOTHER SUCCESS IN WHOOPING COUGH.

I wish to tell the readers of Clinical Medicine of my success with pertussis.

About four weeks ago my son's wife went to see her mother in another part of Texas. Her little girl had been coughing some before she left, but she did not know she had been exposed to the whooping-cough. After she had been there a while the little girl's cough showed the whoop and the two youngest children, a boy four years and the baby boy four months old, showed her what she had to contend with.

She consulted a physician and it was soon known that all three of her children had the

Too anxious attention to rules hath often hurt those who were well, and added unnecessarily to the distress of the sick.—Heberden.

Neglecting autotoxemia, "just like trying to clean an old gun before the charge is removed."—*Med. Counselor.*

whooping-cough. She told her mother that she must take the children home where her father-in-law could stop the trouble.

She brought the children to me and immediately I put them on pink calomel tablets, grs. 1-10, calcium sulphide to saturation, calx iodata and the sulphocarbolates. I also gave them for fever aconitine and to make them rest, infant's anodyne.

Yesterday we celebrated the Fourth on McKinney Bayou, fishing. The baby coughed once very lightly. They are well of the whooping-cough. How is that for high?

F. M. LINNARD.

Texarkana, Ark.

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Strange, isn't it, that "these alkaloidal fellows" will insist that they can cure such things as whooping-cough, which the text-books say are "not amenable to treatment?" —ED.

MIDDLE EAR DISEASE.

A correspondent calls our attention to the fact that he has had almost unbroken success with calx iodata in middle ear diseases, especially when suppuration is present. He has also treated several cases of pyosalpinx with most gratifying results and he points out that the free use of calcidin in such cases will save operative procedures very often. This is well worth knowing. We would add the suggestion that in such cases calx iodata and calcium sulphide be given in alternation together with echinacea.

A DOCTOR'S LIFE IN THE PHILIPPINES.

As you may possibly know I left Kentucky on the 20th of August, 1905, having received an appointment from the Governor General of the Philippine Isands as a Medical Inspector in the Medical Division, Philippine Constabulary, with rank as third lieutenant at a salary of $2,280 Philippine currency.

I had a pleasant trip across the states and a most delightful voyage across the ocean. I sailed from Seattle and went the northern route which takes one in sight of the Aleutian Islands. We went near enough to these islands to see the volcanoes. I got pretty cold at this place, having brought no overcoat with me; having heard my sister talk so much of it being so hot I gave my overcoat away and started with nothing but very thin clothes.

I find the climate delightful here and while it gets pretty hot in the middle of the day there is always a breeze and the nights are cool and very pleasant; sometimes so cool that a woolen blanket feels good. I do not exactly agree with the fellow who said that "after living in the Philippine Islands a man would enjoy wearing an overcoat in the Hereafter." The Islands, though, certainly do have a tendency to increase the devil's pay-roll, judging from the number of convicts in the Bilibid prison at Manila, who number five thousand. They will not keep their hands off Uncle Sam's money and Bilibid is the result.

But to get back to my trip. I hold the banner record for the greatest number of days spent on a regular ship between Seattle and Manila, having been forty-five days. I also hold the banner record for quick promotion in the Medical Division, as I am now first lieutenant with salary of thirty-six hundred and eighty dollars. I have been promoted from third to first lieutenant inside of four months, and have recently passed the examination for a captaincy.

As it happened that I was assigned to a station among the Ilocanos when I first came over here, I will describe them. They are a very light brown people; a great many are

Abnormal increase of sensuality is a sign of the times—a sign of luxury, says *The Medical Counselor*—good counsel, too.

Goodhue has discovered the germ of leprosy in the mosquito and in the bedbug. Now look for it in the housefly.

nearly white and none of them show any characteristics of the negro, nor do any other tribes that I have seen. They have long, straight, black hair, small hands and feet, eyes black and well-shaped, features very intelligent. The men are well muscled but have small waists.

The women are very good looking, having an oval face, very small mouth and teeth; they have a peculiar small sweet voice and are very gentle; a grown women will have a voice like a little child. They are nearly all good singers and make very sweet vocal music.

The Ilocanos as a whole are the most energetic and intelligent natives of the Islands and in my opinion will be the leaders in governing them if America ever sees fit to give them their freedom. The women wear a thin waist called *camais*, which hangs down off one shoulder and is cut very low-necked. The skirt is a piece of goods about a yard wide, wrapped around them once or twice. They wear no shoes or stockings, simply light slippers called *chinelas*, consisting of a sole and a little place to put the toes in.

Of course the rich women wear first and last nearly everything, though their favorite costume seems to be fifteen cents worth of gauze and about $30,000 worth of diamonds. This is an actual fact. I have seen a woman at the theater, not only one but a whole box full, each one with from $10,000 to $50,000 worth of diamonds, no hat nor stockings; and everything in the line of clothes that the whole bunch had on I could put in my pocket—but the cigars not in a bushel basket, since they are anywhere from half a foot to two and a half feet long.

The theaters are something funny; there is a little box on the front of the stage raised about two feet above the floor opening towards the back of the stage into which a prompter sticks his head up, from below, and reads the lines of the play, the actors repeating them after him; of course the prompter speaks in a low voice, but it is plainly audible all over the house.

The women among the working class are very industrious, in fact they do most of the work. It is a queer sight to see them coming to market. They have great, round, shallow baskets on their heads, sometimes weighing more than they can lift, having to get help to, put them on their heads. It is no trouble though, after they get them up; they walk along laughing and talking and do not seem to think they are doing anything. When they get to market they put the basket on the ground and squat along in rows and sell the things that they have brought.

The men wear undershirts and trousers, the latter made of sheeting, all the colors of the rainbow; they have an embroidered top shirt of gauze, made very long, reaching half way to their knees, and worn outside of the trousers.

The natives are all good carpenters, that is so far as carpentering goes in this country. It will seem funny to you, I know, for me to tell you that a native will take a butcher knife and a fishing pole and make a very good house; but for that matter he can make anything from a toothpick to a palace—all he needs is plenty of time and bamboo. He begins to build the house characteristic of the native of the east; that is, he begins at the top or exactly backward from what a white man would do. He makes the roof first and then camps a year or two under it while he is building the rest.

The only thing that goes to work with a will over here is the white ant. They can eat a house up a great deal faster than a native can build it; the only reason they don't is because they don't happen to take a fancy to it, or are busy eating some other house.

A country doctor in New York says: "We sit on the benches and listen to many statements we know are not so."—*Med. Sentinel.*

The work of the clinician may be every whit as scientific as that of his laboratory brother.—Shattuck.

It makes no difference to these ants of what the house is built, for they can tear a stone house down nearly as easy as they can a wooden one. It is said that they can eat the rifling out of a cannon and I guess it is true, for they excrete an acid that quickly corrodes metal.

The native children, up to the age of five or six, wear a piece of goods about the size of a pocket handkerchief around their necks. I have never been able to determine why they wore it, for it seems to me that is a waste of cloth if they are not going to wear any more than that. It may be that the mothers think it will keep them from catching cold, like the mothers in the States think the asafetida bag will keep off disease if worn around the necks of their children. I saw one child who had on a vest that had formerly belonged to some one's dress-suit; he had on absolutely nothing else but the ever present dirt. The native has a funny idea about cleanliness, he will wash and scrub himself as if he were going to a dance and then go right out and sit down in the dust and dirt in the middle of the street or any where else he may happen to be.

It is a custom here that lepers shall come to town every Friday and beg. They are a horrible looking lot; they come to the market-house and sit down on the outside and hold some kind of a religious ceremony; when through, the people give them alms. When they have gotten all the alms they can, they generally sit down in a row and pick vermin out of each others heads. I have seen them lined up in this way to the number of sixty.

There is another thing on just another such savory scale. It is in the "chow" or (eating) line. The natives build a dam across a river and catch millions of small fish, so small that you can hardly see one by its self. They put them in earthen jars, something on the order of making kraut, first a layer of fish and then a little salt; they then bury the jar and let the contents rot for two or three years. When they take it out of the ground limburger cheese would go off and hold its nose—that is if it were not suffocated before it could leave. This mess is called "*bagon*" and is considered by the natives one of the finest delicacies that can be had. They take a pinch of the stuff and a handful of rice, boil it up together and flip it into their mouths. They do not use anything in eating but their fingers.

I cannot describe the modus operandi though I could show you, for I have learned it of a necessity while hiking and riding through the country on different trips, when we would stop at a native's house to have something cooked for us to eat. I learned most of this while I was in Vigan, Ilocos Sur, where I was in charge of the Constabulary Hospital. I was also acting district surgeon (filling both offices) in which capacity I had a chance of visiting all the other hospitals in the district. It was quite an honor for me, a third lieutenant, to be intrusted with the duties of a captain and surgeon, right on the start, and I can truthfully say that my work was satisfactory, as I never had a single report or paper sent back for correction and no criticisms were made.

THOMAS E. MOSS.

Tuguegarao, Cagayan Province, P. I.

(To be continued.)

SOME HINTS FOR THE MANAGEMENT OF SKIN DISEASES.

In some forms of eczema, especially that which attacks the hands of washerwomen and stone or brick masons, due presumably to the long-continued exposure to alkaline soaps and to mortar, I have found carbenzol to be practically a specific and it has responded to each "encore" demanded.

Millican wisely suggests that physicians lose no chance of studying conditions displayed when patients are operated.

There are others. The Disinfectants Committee of the Royal Sanitary Institute, under fire, withdrew its report on disinfectants.

There is a form of leg ulcer, the exciting cause of which is a bruise or scratch along the anterior surface of the tibia, the primary condition leading to necrosis of tissue being either imperfect circulation or a poorly nourished sanguinary current.

A case of four years' standing was entirely cured in four weeks by the local application of carbenzol with the arsenates of iron, quinine and strychnine and nuclein internally. Whether these will respond to an "encore" remains to be seen when other cases of this kind present.

A lady in her night dress attempted to take a pan of boiling water from a gas stove. Unfortunately the pan tipped and the water was spilled over the abdomen and down the right thigh to the knee. The injured parts were at once covered with carbenzol and this with antiseptic gauze with oiled silk over all, the burn covering nearly two square feet of surface. One part, about four inches in diameter, seemed to have been burned deeper than the balance and a blister formed. This was emptied through the adjoining healthy tissue and the wounds healed without further trouble. In the treatment of burns carbenzol has responded to many "encores."

A peculiar case: A lady enciente, presented with the labiæ (majora and minora) covered with a crop of warts that looked like the surface of a cauliflower. Her physician did nothing and her child was born. The doctor proposed to remove the excrescences with the knife, but before operating he met with an accident. I was called. I used carbenzol applications freely, and in less than one week the parts were entirely free from the morbid growths and the lady was delighted in that she was relieved of her trouble and fear of the knife at one and the same time. Needless to say she is enthusiastic about carbenzol.

Whether this will respond to an "encore" I cannot say.

During the month of August I have had two cases of hay fever, both "old stagers" who have been compelled to leave the neighborhood of Chicago each year during the past decade. I determined to try carbenzol by nebulization. I will say par parenthesis, that I had already tried almost everything ever suggested but with negative results. Well, I procured an atomizer that would nebulize heavy oils and started in. Result: Both patients remained in Chicago this year and neither have had a sign of trouble since the first fit of influenza which has invariably ushered in their annual attacks.

"Encore?" I don't know, but it is worth while to clap your hands and watch the result.

Soft corns! Do you know them? I guess so; they are no longer a terror. Carbenzol pulls their teeth. They have responded to my "encore" many times.

And then, there are odorous feet, odorous armpits and perineums. Carbenzol soap in the bath changes all this to sweet clean inodorous conditions. It is not like most so-called disinfectants which simply replace one bad smell with another, and I have met with no instance where it has failed to respond to the "encore."

Brother, if you have not heard the story of "encore" write to me personally and I will tell it to you.

Voila tout.

W. T. Thackeray.

Chicago, Ill.

—:o:—

This is only one of many reports we have received from our readers concerning the efficiency of this remedy in the treatment of skin troubles of various kinds. It won't cure them all—nothing will—but it helps in many, that's sure.—Ed.

The Lancet, June 9, reports two cures of well developed tetanus by large doses of cannabis indica, in India.

HgI locally and calcium sulphide, gr. j, daily in divided doses makes a good routine treatment after boils are advanced.—*Med. Summary.*

AMONG THE BOOKS

THE AMERICANA.

This is the title of a new cyclopedia issued by the *Scientific American*. It is presented in 16 large volumes, well printed and bound. We have not yet had time to peruse it completely but have examined several articles to satisfy ourselves as to the method of treating subjects in which our profession is specially interested. The article on Medicine is supplied by Dr. Osler and covers eight pages. That on Osteopathy covers 11 pages, is prepared by authorities of that sect and presents it under the guise of a legitimate scientific movement, thus giving the endorsement of the work to that monumental production of illiterate pseudo-science. Not a word is presented to distinguish it from really scientific topics. Christian science is likewise allotted more than two pages, besides a goodly space devoted to a biography of the Eddy, largely exceeding that permitted to Senn. Keeley too comes in for two fine ads, a biographic note and a section on the gold (?) cure, although the writer seems to have had some trace of scruples, as he acknowledges that the claims are not "endorsed by the regular medical profession," but the statement is so made that it seems more like a reflection on the latter than on the Keeley business, whose claims of hundreds of thousands of cures are paraded as matters of legitimate scientific interest, instead of being relegated to their place among other advertisements. The advertising solicitor seems to have displayed little activity though, for neither peruna, Lydia Pinkham nor Lobb (who should be consulted when others fail) receive mention. And yet it seems that one quack should receive equal privileges with another in a "truly scientific" work. Of course Dowie is included, being alloted 42 lines, or three more than Osler!

Apart from its merits in other respects, the work in its present form is an insult to science, in elevating such notorious pretenders to the dignity of a place by the side of Newton and Bichat, Laplace and Pasteur; and while this applies with peculiar force to the medical profession, everyone interested in any department of learning should resent this association of quackery with the illustrious men who have advanced legitimate science.

WITTHAUS AND BECKER'S MEDICAL JURISPRUDENCE.

Forensic Medicine and Toxicology. Prepared by numerous experts of acknowledged authority, under the supervision and editorship of R. A. Witthaus, A. M., M. D., of Cornell University, and Tracy C. Becker, A. B., LL. B. of the University of Buffalo. Second edition, vol. one, New York, 1906. Publishers, Wm. Wood & Co. $6.00.

For weal or for woe the age we live in is one in which Natural Science dominates the minds of men. The present physician is required, therefore, to be not merely an artist, but a scientist first of all. Hence the legal relations of the physician to society are at present closer than ever. But more, those relations must be those of one who assumes the responsibility of healing the sick. These relations grew and grow with the advance of knowledge and morals and the social rights of humanity. Human rights, are, however, determined by the English speaking nations and populations by precedents, and these precedents in medico-legal affairs have accu-

mulated among them in vast records that are not easily accessible to either physician or lawyer. Hence the promising usefulness of this work, the first volume of which is before us, comprising 996 pages, in which are discussed: History; Legal Relations of Physicians and Surgeon; Law of Evidence; Synopsis of the Laws of the Several States and Territories of the United States and Great Britain, etc.; Part of the Thanatological (death concern) Division of Forensic Medicine.

Each of the remaining three volumes will comprise about as many pages. The volumes will not be sold separately. We would advise the interested reader to send for the "Descriptive Circular" in which are given the contents of this and the other volumes, and specimen pages. We hail this grand work as a token of the progress we are making among the rest of the cultured nations of the world.

The mechanical character of the first volume is all that could be desired.

CARR'S PRACTICE OF PEDIATRICS.

By American and English authors, edited by W. L. Carr, A. M., M. D. Illustrated with 199 engravings and 32 full page plates. Lea Bros. & Co. Philadelphia and New York, 1906, $6.00.

This volume of 991 pages and a good serviceable index is the second of the three promised by the publishers in "The Practitioner's Library." Written by various authors in active and extensive practice it insures less of copying and more of original views in the presentation of the clinical picture and treatment of the various diseases, both those common to childhood and adolescence, and those peculiar to childhood. Encyclopedic as the work is it can not be expected to be monographic also. This the diligent practician will have to seek elsewhere. But as the latest that can be had on the subject we find this volume eminently useful.

PROGRESSIVE MEDICINE.

Progressive Medicine, Vol. VIII, No. 2, June 1st, 1906. Lea Bros. Philadelphia, $6.00 per annum. Editors, Professors H. A. Hare and H. R. M. Landis, of Jefferson Medical College, Philadelphia.

This quarterly always did, and this number does now fully justify its name; and the book is of incalculable benefit to the efficient practician to be informed of the latest progress in the science and art of medicine, otherwise efficiency is hampered. The amount of information in this number is wonderful. Hernia is the first and shortest article. In surgery of the abdomen exclusive of hernia, the section on the peritoneum is to our mind of the greatest interest to the general practician, but not less so is the progress in the diseases of the other abdominal organs.

On page 56, we would, however, ask whether the statement that Dahlgren "has seen energetic peristalsis excited by the sulphate of atropine given hypodermically, using one mgr. (gr. 1-67) in each four or five injections if necessary" is correct. The opposite remedies such as eserine, are usually given in these cases.

The other articles are Gynecology, Diseases of the Blood, Diathetics and Metabolics, Spleen, Thyroid and Lymphatic system and Ophthalmology. The index is just good enough if you first familiarize yourself with the volume. Historically too the writers continually refer to previous reports on the subject under discussion, and this feature is of great value. Altogether we consider this number of the quarterly of exceeding value.

However necessary surgery may be, however much we may honor it, it is after all the despair of medicine.—*Amer. Med.*

Since 1890 the surgeons have presided over the A. M. A. thirteen times, the poor general practician only three times.—*Amer. Med.*

CONDENSED QUERIES ANSWERED

PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES.

ANSWER TO QUERY 5063. "Stomach Trouble." I desire to compliment Dr. Abbott on his elegant suggestions and in addition can add that I believe the doctor's wife to be suffering from atrophy of the peptic glands. There seems to be a prevailing acid condition and if the doctor will make a litmus test he will find it to be acid in reaction. The doctor does not state the condition of emaciation, if it was rapid or gradual. A neat test for acid gastric juice is a solution of Congo red in dilute alcohol. A few drops added to a test tube of water makes a deep red solution. Now if the doctor's wife has nausea and uncontrollable vomiting a test meal in this case is easily obtainable. A few drops of the stomach contents would turn the above solution *blue*. The test detects acid in a solution of 1 to 50,000. The same contents would turn blue litmus *red*. Hence, if the above tests prove true in her case the logical treatment indicated would be alkaline. Her stomach being extremely irritable and hyperacid would welcome these solutions *as hot as can be borne*, sipped slowly, and in small quantities. Magnesium sulphate and water, or better still, sodium chloride, half a dram to a cupful of hot water in the morning. In her case nausea could be controlled with small doses of champagne; vin mariani is indicated. As these solutions are gradually retained I would cautiously add equal parts of hot water and milk with three tablespoonfuls of peptogenic milk powder. From the doctor's description it looks like a chronic case which has assumed a dangerous aspect. To the above treatment colonic retention of sodium chloride solution once daily. The following may be of service: Acidi carbolici, 0.015; bismuth subnit, 0.65; mucilag. acaciae 2.00; aq. menth. pep., 8.00. Tablespoonful every one to three hours.

——, Missouri. H. G.

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Don't put too much emphasis on your acid test, Doctor. The secretions of the stomach are *normally* acid and will respond to your acid test when there is no trouble whatever with that organ. Only when there is an abnormal quantity of HCl does the condition require treatment. When there is "atrophy of the peptic glands" HCl is reduced or absent..—ED.

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ANSWER TO QUERY 5094. "Can pterygium be cured without the use of the knife?" The uncolored fl. ext. of pinus canadensis applied with a camelshair pencil will remove them. I begin with a diluted solution, using glycerin, and increase strength as the case improves. No dilution if the eye will stand it. The time is approaching when pneumonia will become prevalent and in an epidemic of the disease we had last winter, in eighteen cases of the trouble, all came through in good shape except three, one an old man nearly seventy years old who was a habitual drinker, and the other two were men in the prime of life but had been on a spree of a week's duration and laid out in the cold. Bronchopneumonia had set in and enveloped both lungs. The treatment consisted in "clean out and clean up" with calomel and podophyllin followed with the sulphocarbolates and cold water to the chest,—perhaps hot, as the patient could stand it, with benefit; ice cap to head, hot water to spine and extremities. Cold

water enema if the fever jumped up. I believe there is too much medication with pneumonia patients, as generally treated.

V. P. S., Nevada.

QUERIES.

QUERY 5119:—"Psoriasis." I am and have been for some time suffering from psoriasis on the body and scalp, badly affected. I have treated myself, and friends in the profession have treated me, but without avail. Can you help me?

J. D. D., New York.

A chronic skin disease remains uncured because there is a continuous cause keeping it up or the natural powers of the body are insufficient to establish and sustain the reparative process. There may be a taint in the blood such as syphilis, or the skin is called upon to eliminate toxic matter usually not passing through its structures, but now doing so and causing irritation. This may be due to toxins absorbed from the alimentary canal, or from the tissues, or from some collection of toxins somewhere in the body, as an old pelvic abscess. Or, the liver, lungs, or kidneys, generally the latter, being partly disabled by disease, the skin is called upon to vicariously perform their functions as eliminants.

This shows how necessary it is to study the conditions present, in place of merely prescribing for a "psoriasis." Have the urine examined, for total daily solid excretion as well as for abnormal constituents, and endeavor to bring its action to the normal point. See likewise to the liver. Thoroughly empty the bowel—fecal toxemia is the most frequent cause of cutaneous disorders. Regulate the diet and habits—uric acid invariably irritates the skin. The skin is an index of the internal conditions. There may be local causes, as yet undiscovered microbes, or simply deposits of exudative debris. It is well to begin with germicides and a few applications of carbenzol, or any other similar agent may usefully initiate the local treatment. Iodine and mercury, in lotion or ointment, combine germicidal with absorptive properties, and are doubly valuable. Sometimes the tissues are so infiltrated that no ordinary agent will take effect, and we have succeeded by first removing this induration by the absorptive action of a rubber bandage, by continuous applications of pads saturated with pure glycerin, by repeated blisters or painting with tincture of iodine. Other applications in psoriasis come under the head of sedatives to allay irritation of acute periods, the best being a cream of bismuth subnitrate and water; stimulants to arouse a more active circulation, such as a weak lotion of cantharidin or rhus; protectives, such as painting with compound tincture of benzoin; or local foods, such as lanolin, sanguiferrin, nuclein or cod-liver oil. Which of these may be needed depends on the case.—ED.

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QUERY 5120:—"Lentigo." I want some help on a case I have of freckles on the face of a young lady of eighteen. I have had her on alteratives and tonics for twelve months; no change in complexion. Please suggest and oblige.

J. T. C., Texas.

Lentigo is not always amenable to treatment, as there are several varieties. The disorder is really closely allied to chloasma and the treatment for one is that for the other. You do not say what form of "freckles" you have to deal with; those appearing before the fifth year are, properly, pigmentary nevi. Occasionally children are born with these macules. The variety which

Prevention and therapeutics must finally make surgery largely unnecessary. Our real duty is to cure.—*Amer. Med.*

Germany suggests special schools for the talented. Sorry, but we are too busy to attend one at present.

remains constantly is less apt to be affected by treatment than those freckles which appear in summer and fade as winter approaches. Ephilides are usually "crowded" somewhat and have pigmentary deposit only in the basal layer of the epidermis and there is no change in blood vessels. "Freckles," however, are discrete, slightly elevated and have pigment in *all* layers of the epidermis as well as in the cutis and there is more or less change in the small vessels. To prevent freckles in persons predisposed to them is almost impossible, though the use of blue veils and application of a calamine lotion may help. The application of pure lemon juice is efficacious in some cases; just touch each spot with a wooden tooth-pick dipped in the juice and allow to dry. Hydrogen peroxide has also given results. Most of the advertised and drug-store lotions are useless—if not really injurious, and have as their base mercury bichlor. One of the best is hydrarg. bichlor., gr. 6; ac. acet. dil., dr. 2; ac. boric, gr. 40; aquæ rosæ, ad oz. 4. Mix well and apply twice daily, at first softly, later rubbing in. Another formula: Hydrarg. ammon., bismuth subnit., aa. dr. 1; ungt aquæ rosæ, ad oz. 1 M. This keeps the skin from freckling. Electrolysis is used for very dark and pronounced lentigo.

Copper oleate, gr. 10 to 30, with lanolin and benzoated lard to make oz. 1, is said to be remarkably useful. Salicylic acid, gr. 5 to the ounces, also. Zinc sulphocarbolate has given excellent results, this last year; apply thus: Zinc sulphocarbolate, gr. 5; alcoholis, dr. 1-2; collodii, oz. 1. M. and cover each freckle carefully. If *none* of these prove efficacious, Doctor, the freckles will simply have to be looked upon as "an ornament."

Try washing with H_2O_2 for two days (three times a day), then apply the copper oleate formula, and finally, if they persist, the last formula. We have cured several cases thus.—Ed.

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Query 5121:—"Extemporaneous Cough Syrups." What is the most convenient way of preparing cough syrups from the various cough granules and tablets.

G. A. F., Illinois.

Now, Doctor, "the best method of making an extemporaneous cough syrup" is not to *make* any, but to procure from a reliable manufacturing pharmacist a gallon each of simple syrup) and aromatic elixir. By dissolving the desired number of granules or tablets in a little alcohol and water, or glycerin and water, and adding equal parts of simple syrup and aromatic elixir, we have as perfect a preparation as any physician can dispense. There are, of course, any number of ways of making syrups, but we have long since discarded everything for this plan, which has yet to fail us. You can procure the elixirs almost as cheaply as you can make them and you do not have any mistakes or faulty compound. Remember that in some cases sugar is objectionable and it is then a good plan to dissolve the medication desired in glycerin and water and sweeten this slightly with saccharin and color with carmine; clove or peppermint may be added to flavor. By carrying a few saccharin and flavoring tablets with you, you can always make a satisfactory cough syrup in a cup or glass at the house. When dispensing from the office use the elixirs. Do not forget that a good base for a cough syrup is syrup of yerba santa. May we here express it as our opinion that in most cases the use of "cough syrups" does more harm than good. The stomach is injured and the cough not benefited. The exhibition of the indicated remedy (in granule or tablet or a simple saccharinated solution) is better

Who can not be cured should be insured. A rolling stone gathers much polish. The want of money is the root of evil.—Baerens.

A thorn on the bush is worth two in the hand. The white lies doctors tell are usually only truth sugar coated with mercy.—Baerens.

practice. If large doses of some sweet fluid *must* be given then glycerin and water will prove a really useful menstruum.—Ed.

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Query 5122:—"Intestinal Obstruction." Girl, age 2 1-2, weight 37 pounds. Diet still chiefly milk and Mellin's food, with bread and butter, occasional apple (scraped), or juice of orange. From birth obstinately constipated, enemas necessary even after laxatives. Past ten days repeated attacks of fever, 102° to 103° F.; pulse almost beyond counting. After some hours return to normal. Constant desire to go to stool, during fever. No bloating, no apparent tenderness. Much gas; after passing it fever disappears. No head or stomach symptoms whatever. Think the child well, when recurrence.

I. M. M., New York.

Your little patient may be suffering from retention with toxemia. You do not tell us what the stools are like, neither do you mention urine or signs of cerebral or spinal affection. The *gas* and absence of fever after passage would lead us to diagnose intestinal obstruction with fermentation of retained contents. The free use of high enemata (alkaline and antiseptic) following with olive oil, massage and the exhibition of small doses of papayotin and calcium or sodium sulphocarbolate will suggest themselves. Give this child one small teaspoonful of saline laxative morning and night. The child probably has an anal sphincter that should be dilated. Use the index finger or thumb, well oiled. Give predigested cereal food—Price's egg-o-see or "cereo." Water and fruit juice ad lib. Better look for abnormalities: operative interference may be needed. How about hernia?—Ed.

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Query 5123:—"Obscure Neurosis: Pelvic Origin Probable." Spinster, 25; weight 130 lbs.; has lost some flesh in last few months. Complexion sallow or waxy; never been healthy, treated ten years or more for stomach trouble, heart trouble, etc., up to two years ago.

She nursed her father through an illness of several months two years ago, during which she was with him almost continually day and night. When he died she had a severe nervous spell, with convulsive jerking of the arms, worse in the right. She has these spells at times. Kidneys act naturally, quantity of urine normal, liver rather torpid, don't take exercise, was very energetic before illness, no paralysis or anesthesia, sleeps well, lacks nerve force, appears dull, eats little, no meat, a little fish occasionally, eats part of a poached egg but does not like it; don't want milk or soups, in fact, is very finicky in regard to food; takes some fruit juices. Lately vomits or regurgitates some. Does not suffer nausea.

F. O. B., Louisiana.

The attacks that you speak of are due to some irritative focus, probably tubal or ovarian inflammation. Wash out the stomach, give a test meal, withdraw contents an hour later and note conditions. Test reflexes carefully, go over liver area and note enlargement or other abnormality. Percuss the spine for hyperesthetic areas, note condition of tongue, state whether extremities are cold or ankles swollen, and make a full pelvic and rectal examination. Dilate the sphincter ani if needed, and give every day for a week a hot retained douche and an enema of warm saline solution. Have this patient rubbed from head to foot morning and night with a cool salt solution, one teaspoonful of salt to the quart of water, then partly dry the skin, have some alcohol thrown into the hand and rub the skin with it briskly, following with a very rough towel. Let her drink the first thing in the morning from one-half to a whole glass of hot water, preceding this with a teaspoonful of saline dissolved in as little water as is necessary, then let her take a brisk walk, practising deep breathing the while, and return and have breakfast, which should consist of

Astonishing how much laziness there is going around as "poor health." It's a wrong brain that has no learning.—Baerens.

Always endeavor to balance a certain amount of dignity by an equal amount of ability.—Baerens, *Med. Mirror.*

fruit, a few spoonfuls of well cooked cereal with cream or milk, and a cup of malt coffee (Kneipp). Stool should follow breakfast. Just prior to eating give three times a day juglandin, two granules; immediately after eating give papayotin, three granules. Follow in an hour with five minims of nitrohydrochloric acid in half a glass of water. This will improve the whole state of affairs. Elimination will be quickened, assimilation improved and nerve balance secured, but one thing is essential to a cure and that is to find out where the main irritative center is. A nervine at bedtime would be useful—five granules each of avenin and cypripedin in a glass of hot water.—Ed.

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Query 5124:—"Hemorrhoids: Phthisis." Farmer, 60, hard worker and big eater, dyspeptic fifteen years, taking treatment twelve years. Five years ago had bronchitis from which he has not recovered, been in a low state since but with an immense appetite. He is also affected with piles, several years, at times as large as hens' eggs. At such times his bowels move three to six times per day with hard straining. Eighteen months ago a bad cough set in; suspected tuberculosis, found quantities of tubercle bacilli. Put him on the "antitubercular" formula, with calcium sulphide and nuclein, from which he has derived much benefit. The first month of this treatment showed marked improvement. He took a deep cold later and has not been getting on so well since. Piles returned, but not so large. Bowels move four times per day, stools healthy, occasionally watery. Calcium sulphide makes him very sick if he takes over 1-2 grain per day. His cough is dry and he gets up sputa with difficulty. The antituberculosis granule causes fulness in lungs and affects his head. I think it's the sulphide. He lives much in the open air, has had no sweats, lost no flesh. Skin seems in good condition. Eats too much in spite of every caution. Has trouble at times with kidneys. Uses 1-2 lb. tobacco per month. I prescribed rich milk, butter, meats, soups, etc., a little at a time, taken six times per day, but don't think this has been done very carefully.

I examined his sputa again last week, stained several slides, but found only a few bacilli thinly scattered, one in a place. I have been using saline laxative when needed and have tried a few doses of the intestinal antiseptics.

C. E. M., North Carolina.

This man's age is against him and his manner of eating also. Inject those piles—using the strong solution of acid carbolic (ac. carbolic, two drams; ol. olivæ, one dram); inject after a thorough dilation of sphincter, taking the larger tumor first and injecting with an ordinary needle and syringe, drop by drop, into the center of the pile, till it turns white and is hard. Turn point of needle from side to side and inject as you withdraw; if blood follows you have not used enough. Wipe off the pile and anoint with vaselin; keep the bowel closed for one or two days, then give castor oil and throw into the bowel four ounces ol. olivæ and let him stool. Wash off with carbolized water (hot) and insert the hemorrhoidal astringent. This will help him out a great deal. Calx iodata in fairly full doses and calx sulphurata, gr. 1-3, every four hours. The free use of eucalyptolized steam or formalin vapor is also suggested. Geo. E. Leininger & Co., Chicago, sell a most useful little formalin inhaler for 50 cents. Diet must be nutritious but limited—a little every three hours, food demanding long chewing. Keep the skin clean and pores active and make him change his underwear day and night. If possible have him sleep in the open air. By all means continue nuclein and push calcium sulphocarbolate "to effect."—Ed.

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Query 5125:—"Convulsions at Menstrual Period." I have a patient, 23 years old. Was always well and healthy up to age of fourteen years, when her menses came on. Since that time she has had con-

Metschnikoff says it is strawberries that chiefly introduce into the intestinal canal parasites, ova and infectious germs.—*Med. Record.*

Saggio cured a pleurisy by injecting pilocarpine hypodermically, according to an Italian exchange.

vulsions almost every month at her sick period. The convulsions almost always come about the time the flow starts; once in a while they will come at the end of the flow. She is perfectly healthy with this exception. What is the cause of the trouble? What shall I do for her?

F. J., Illinois.

If F. J. had given us his name and address we would have answered him by mail. As it is we are unable to give him any assistance, because he gives us no idea whatever of the type of "convulsion" which occurs. This is probably a minor form of epilepsy, this disease often appearing about the menstrual period. If the doctor will describe condition of patient, giving family history and picture clearly the seizures which occur, we may be able to diagnose the disorder and outline a treatment. F. J. should read the article by Dr. Candler on the treatment of epilepsy which appeared in CLINICAL MEDICINE for February.—ED.

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QUERY 5126:—"Dysmenorrhea, Rheumatism. Masturbation?" Girl, 21, family history good, weight 110, height 5 ft., 3 inches; anemic; very shy and reticent. Eighteen months ago complained of dysmenorrhea and rheumatism. Severe headache always accompanied menses and backache persisted two weeks after flow ceased. Put her on salicylates and iron. No improvement in two months, keeping bowels and kidneys active. Three months ago found slight anteflexion, and advised dilation and curetment, which I did April 18. She came around regularly next month, but flowed for three weeks at intervals of two or three days. During this she would have a day or two in which she felt very good and next day would find her complaining of all kinds of pain, with dark circles under her eyes extending down the furrow between nose and cheek. She now weighs 85 pounds and is extremely weak. Complains principally of pains of rheumatic nature over entire body. Her digestion is good and bowels move freely without medication. I have been suspicious for a long time that she is a masturbator, although she denies it.

P. C. D., Minnesota.

We must congratulate you upon your method of reporting case. If only our correspondents would either write plainly (or even use *ink*) and give vital signs and clinical data we should grow less gray hairs! Your query is offered to the family for answer, and in the meantime we would suggest that you have the urine examined and a blood-count made. Are you sure there is no ovarian or tubal affection? General debility and retention of waste would probably express the general condition, but there is a local wrong which must be discovered and rectified before you can cure her. If she masturbates there will be more or less hypertrophy and inflammation of the *labiæ minoræ* and clitoris. How about the rectum? In the meantime give her gelseminine, anemonin and cicutine hydrobromide, one granule each, every four hours, a saline each morning and hot douche twice weekly (have this retained by using retention plug). Proper diet, open air life and a salt sponge every morning will, we think, soon improve her systemic condition.—ED.

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QUERY 5127:—"Gonorrheal Rheumatism." Cannot you give me a pointer or two on the treatment of gonorrheal rheumatism? I have an obstinate case for which I've been able to do very little. Osler is not a comfort, and all other authors are about as good. I saw a reference in CLINICAL MEDICINE to sulphides in this condition. The patient is loyal but naturally is getting tired of recurrence. Case is about four months' standing. Never was any discharge (urethral) to speak of. It's now at the very small "morning drop" and we are "after" that. Patient wishes to marry, but has promised not to until I give consent.

F. L. C., California.

It is of excellent use to inquire of the means of preventing or staying putrefaction, for therein consisteth the conservation of bodies.—Bacon.

The sudden appearance of violent vomiting, with large frequent watery stools, has no more specific remedy than copper arsenite.—*Chi. Med. Times.*